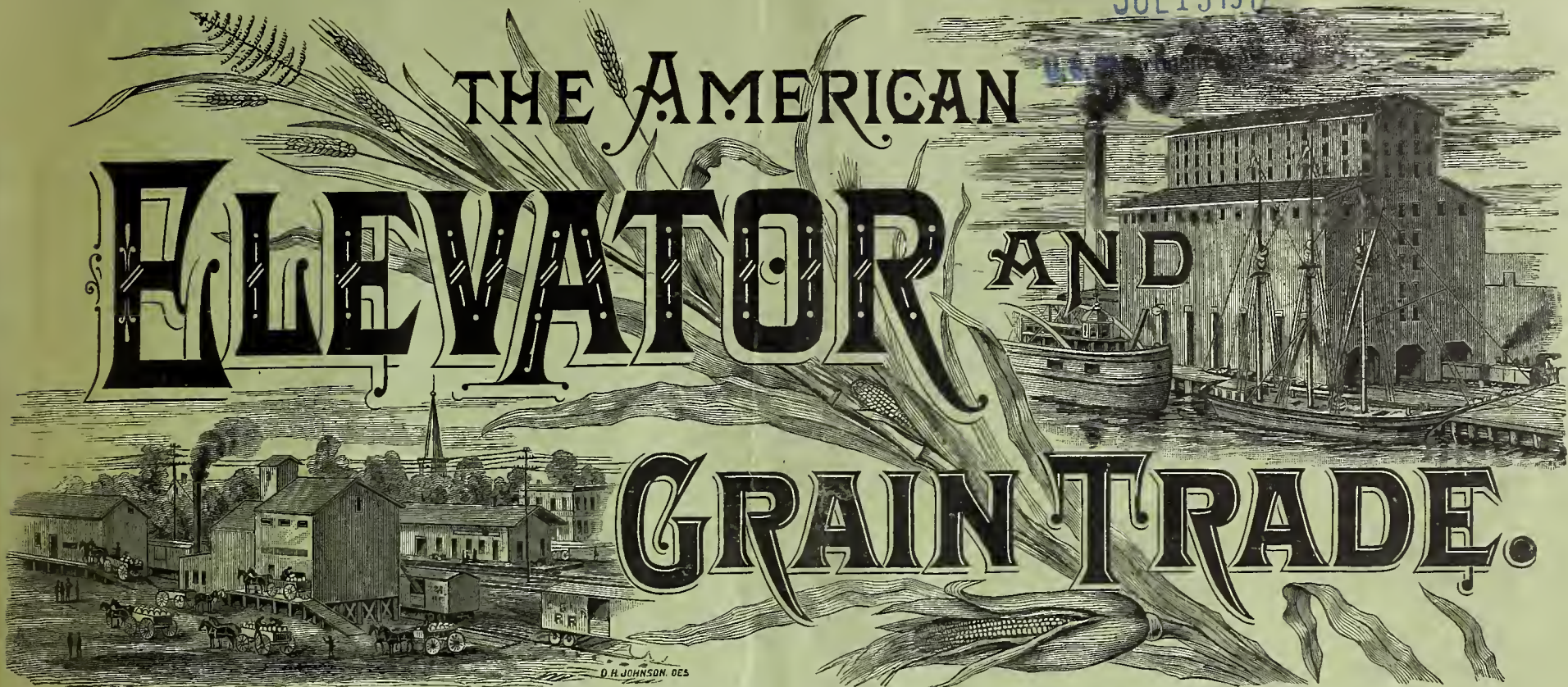


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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
Mitchell Brothers Publishing Co.

VOL. XXXI.

CHICAGO, ILLINOIS, JULY 15, 1912.

No. 1.

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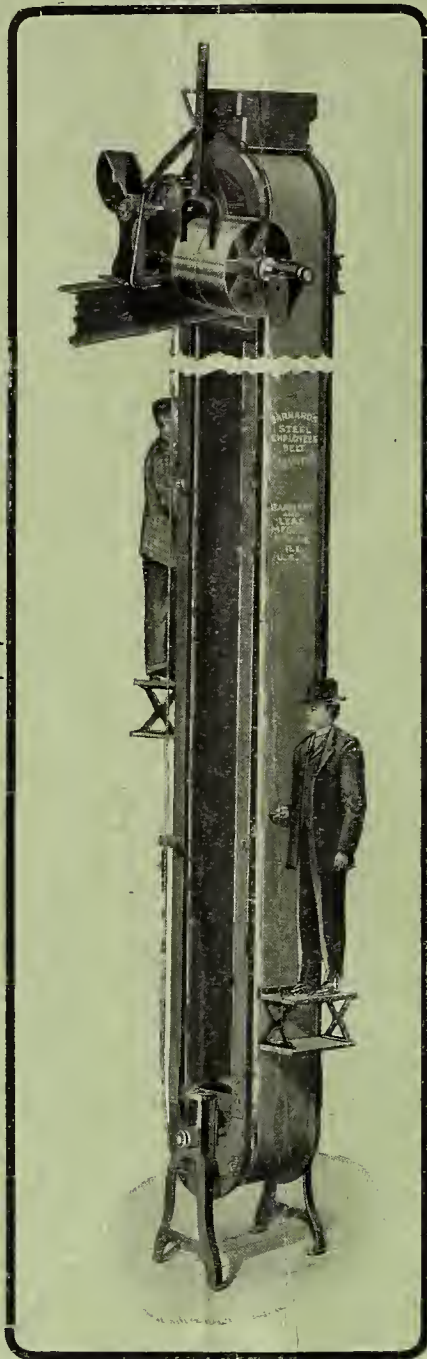
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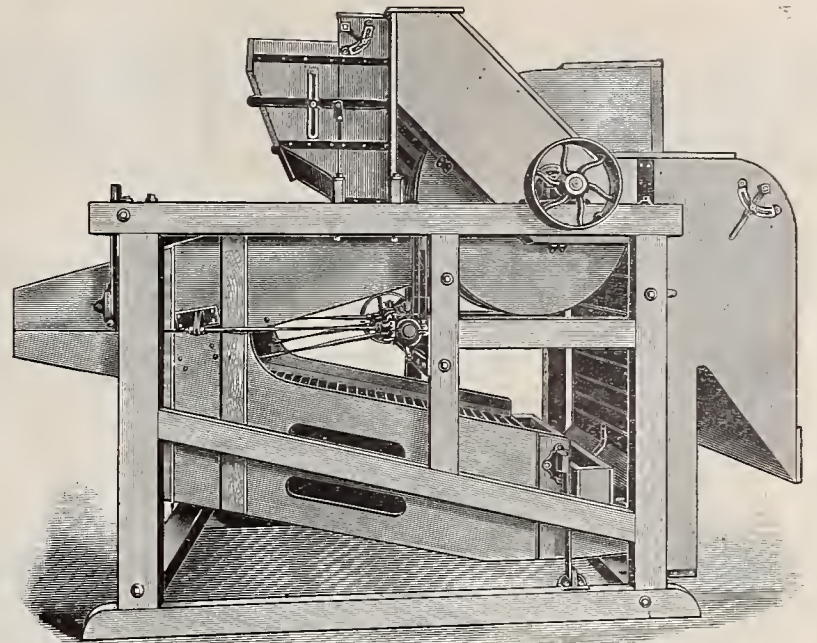
Will remove any desired percentage of moisture from grain, putting it in perfect condition for milling, shipping or storage.

It is working daily drying Wheat, Whole Corn, Cracked Corn, Buckwheat, Beans, etc.

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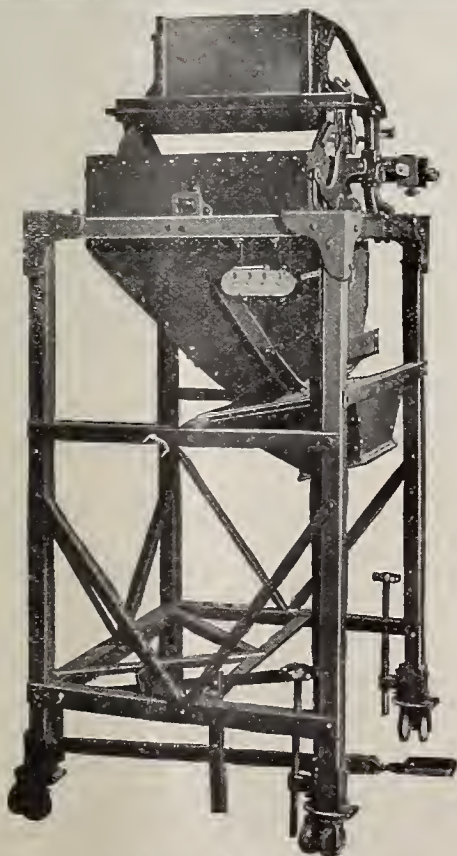


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Designed especially for cleaning corn and removing the cobs as it comes from the Sheller. Equipped with non-choking sieves of special construction and deep reservoir ring oiling boxes. Built of hard wood and iron in capacities from 200 to 2000 bushels per hour.

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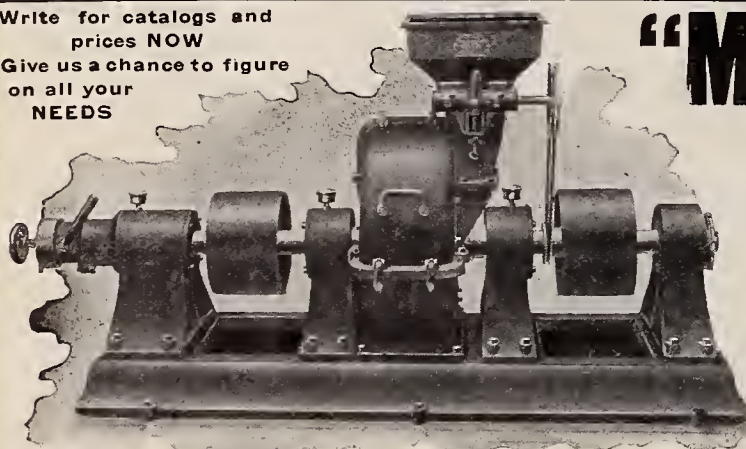
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FEED GRINDERS WILL ALWAYS

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EQUIPPED WITH SCALPER SCREEN, TRAVELING BRUSHES, BLAST REGULATOR AND SINGLE DRUM

THIS machine is built with a full length scalper screen, which runs in an opposite direction from the two lower screens, and it will clean stock in one operation that would otherwise require two runs on a two screen machine. The lower screens are equipped with *Traveling Brushes*, and the Cleaner is also equipped with our Patented *Blast Regulator* which entirely eliminates the use of *Double* or *Divided Drums* in any width of Cleaners desired, and insures a perfectly *Even Blast* the entire width of the Drum. This is one of the most vital points to be considered in choosing a Cleaner, and commends the Standard to those who desire a Machine for the highest quality of efficiency. This Cleaner is of large capacity, and is A1. for Receiving, Grading and Cleaning Grain or Seeds of every variety. We will be pleased to forward full particulars on request. We manufacture a complete line of the *latest improved and most durable and efficient Grain and Seed Cleaners* ever produced. Write us for Catalogue and Discounts.

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Machine=Molded Gears



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DIXON'S SILICA-GRAPHITE PAINT
THE PROVEN SHIELD FOR IRON AND STEEL. INERT
PIGMENTS, GOOD COVERING CAPACITY, DURABILITY
RECORDS IN ALL CLIMATES. Write for Booklet 17-B.
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Very Durable—Small Consumption of Current

Will positively remove all iron from the grain.
Has retaining force of 500 pounds, making it impossible for any iron to pass it.

This machine does not deteriorate with age—on the contrary actually becomes more efficient with use.

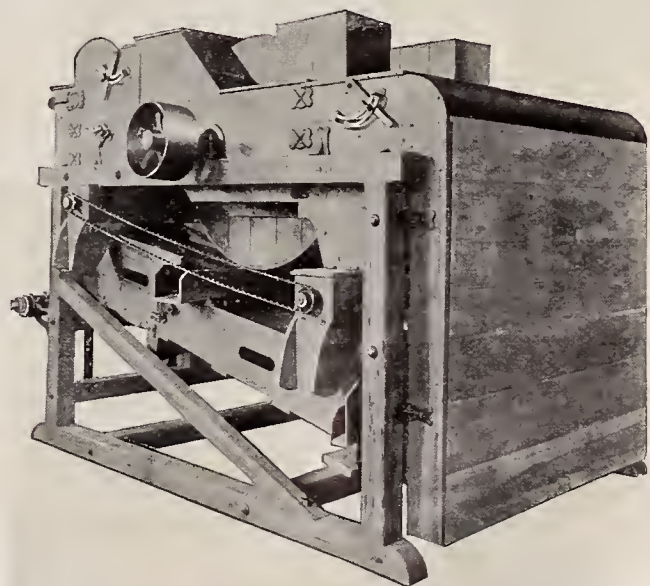
We are prepared to furnish a small inexpensive dynamo for it where current is not available.

INVINCIBLE GRAIN CLEANER COMPANY
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CLEANS ALL KINDS OF GRAIN Without Changing Sieves



EUREKA

HEAVY DUTY CONSTRUCTION

COMBINATION CORN and GRAIN CLEANER

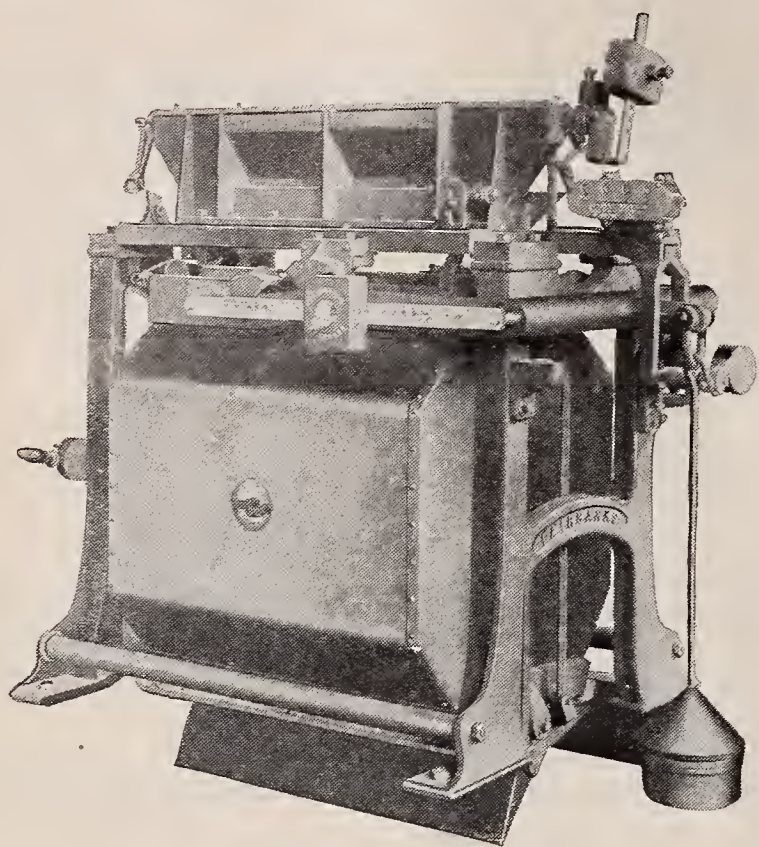
**SAVES TIME
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MORE AND BETTER WORK

Descriptive catalog free

THE S. HOWES COMPANY, Inc.
Silver Creek, N. Y.



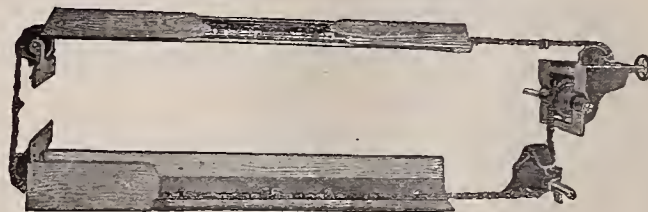


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The most efficient automatic weighing machine on the market. Send for new catalog No. 544QH explaining why.

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The Sidney Chain Drag Feeders



Style A



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THE above Drags are complete and consist of the following: Cast Head with Tightener Sprocket, Shafts and Bearings; Cast Adjustable Rake-off with Sprocket, Shaft and Bearings; Cast Ends with Sprocket, Shaft and Bearings; Cast Iron Lining used in bottom of Drag Box; Wrought Iron Return Track for the Drag Chain to return on. The only difference between Style "A" and Style "B": Style "A" is complete with wood bottom box and return box which we do not furnish with Style B. All iron bearings are babbitted and furnished with oil holes.

We manufacture five different style Corn Shellers, also Grain Cleaners, Wagon Dumps, Grain Feeders, Manlifts. Everything for an Elevator from basement to cupola.

Write for our complete Catalogue No. 25.

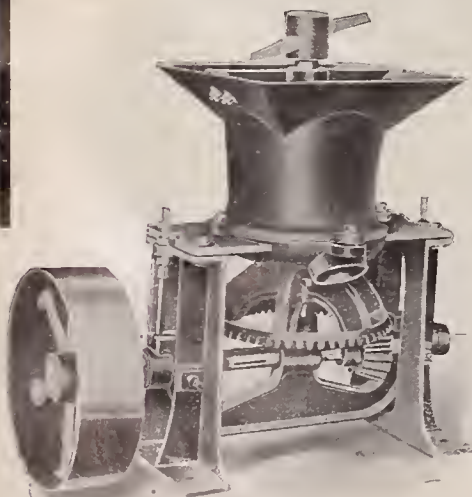
The Philip Smith Mnfg. Company
Sidney, Ohio

A Complete Stock Carried at Enterprise, Kan.



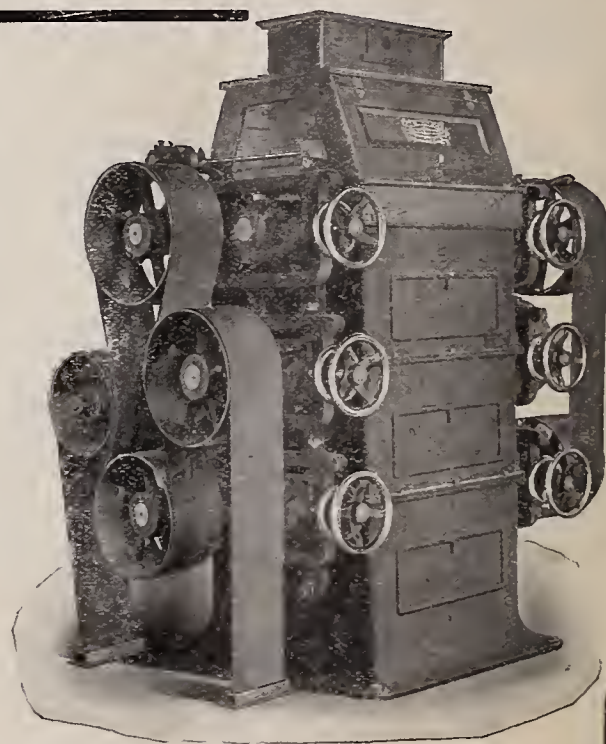
Two Wonderful Wolf Creations

With either of the machines herewith illustrated, there is absolutely no fault to be found. In saying that they are wonderful, we are sincere in our expression; and if given an opportunity believe we can easily convince *you* of their truly wonderful merits. There are so many meritorious features about both of these machines which you should know about that it will pay you to send for full particulars.



Wolf Mounted Corn and Cob Crusher

For reducing ear corn fine enough to be ground to the best advantage on a Burr, Roller or other grinding mill, the "Wolf" Mounted Crusher is undoubtedly unequalled. Being fitted with accurately proportioned gears, it grinds steadily and smoothly. For cracking corn, crushing bones, carbon, etc., you will find this machine is a veritable masterpiece. *A request for full particulars is well worth while.*

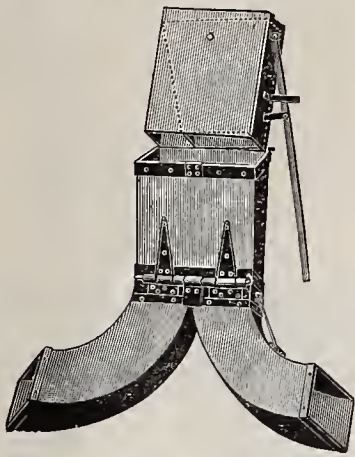


Wolf Three-Pair-High Roller Mill

For feed grinding, this mill has won and maintains an untouched record for superiority. It will grind corn, rye, oats, etc., into high-grade feed with astonishing ease and rapidity. May be fitted with either Collar Oil or Ball Bearings. Strongly constructed throughout and is practically unaffected by vibration. If you will write for full particulars we will prove to you why this mill has no peers.

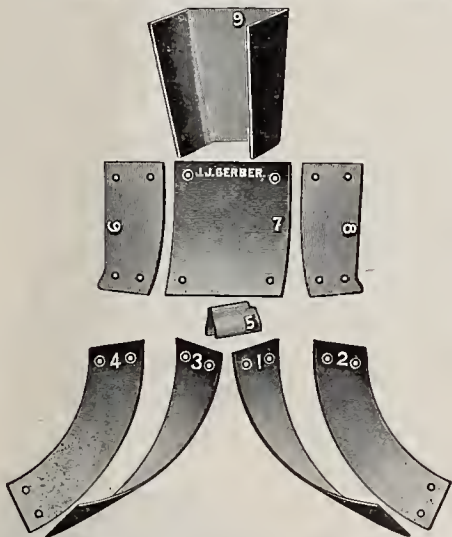
THE WOLF COMPANY, Chambersburg, Pa.

THE GERBER BIFURCATED GRAIN SPOUT



The only Spout made for trimming cars that will load both ends at the same time. It is made very heavy and has cast linings.

Cast Linings for Bifurcated Grain Spout

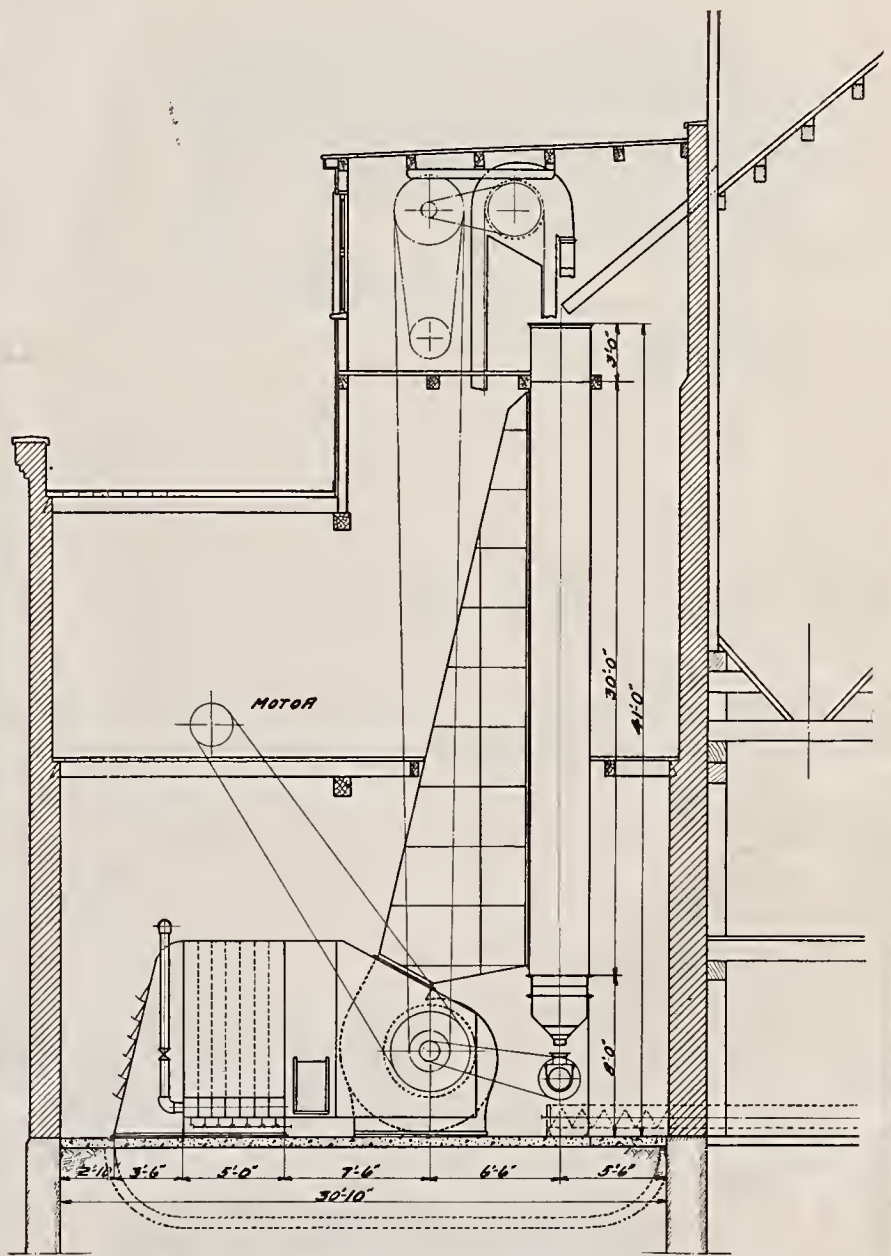


When ordering cast linings give number of parts required.

For particulars write

J. J. GERBER - MINNEAPOLIS, MINN

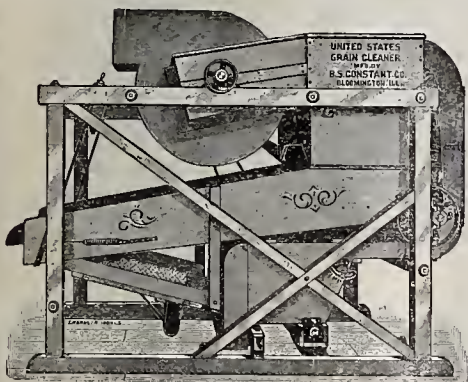
THE ELLIS DRIER CO.



Cross section of the Quaker Oats Co's Drying Plant at Arkon, Ohio.

The Quaker Oats plant has a capacity of 500 bushels on heavy drying and is built with an exceptionally large independent cooler for the purpose of handling corn when only light drying is done. When doing this light work the machine will handle from 750 to 1000 bushels per hour. Process patents covering the re-utilization of heat contained in the exhaust air have been utilized in this plant.

Postal Telegraph Building
CHICAGO
U. S. A.



THE U. S. Grain Cleaner

is the best in the Union and should be in the top of all elevators where Corn, Oats and Wheat are shipped.

Higher Grades—Higher Prices.
Long life machine.
Ring or Chain Oiling Bearings.
Balanced Eccentrix.
Five Separations and

All the Corn Saved.

The Constant Safety Ball Bearing Man-lift

the most satisfactory connecting link between Cleaner and Sheller.

Best made.
Easiest and safest.
Adjustable Brakes
which we guarantee.

State distance between floors and get our

Net Price

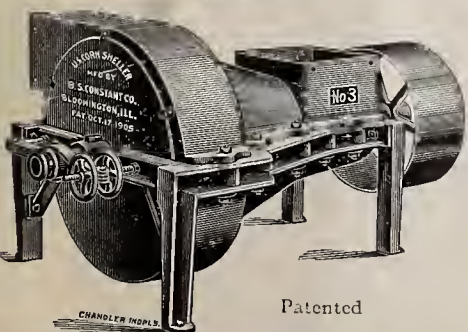
U. S. Corn Sheller

Fan Discharge,
over or under, right or left hand.

Iron or Wood Frame.
No Lower Hoppering.
Cheapest Installed.
Quickest and Cheapest Repaired
of any Sheller on the market.

Send for a Catalog.

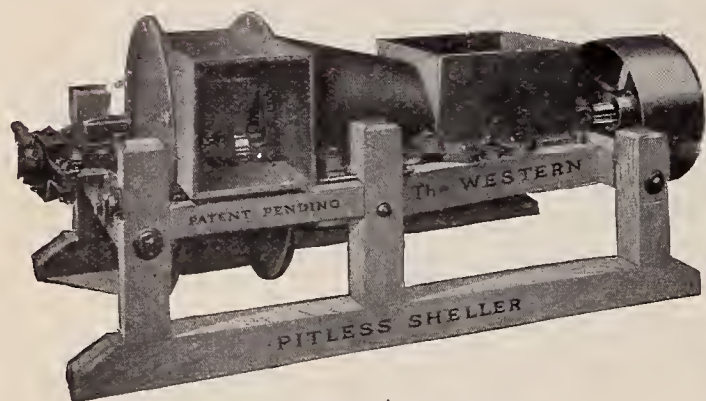
B. S. CONSTANT CO.
Bloomington Illinois



Patented

WESTERN QUALITY

is shown in both Shellers and Cleaners as well as the entire line of Machinery and Supplies



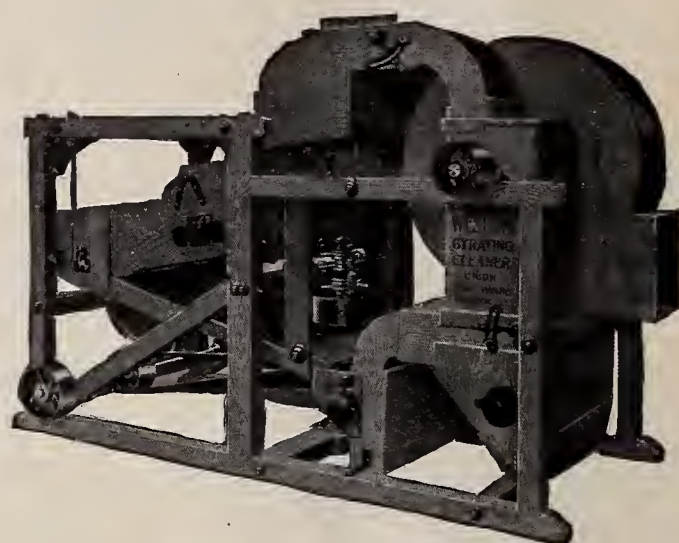
The Western Pitless Sheller

When you build or improve, use care in the selection of your machinery and supplies. It is not what we say about the WESTERN Cleaners and Shellers, but the service and satisfaction they give, the kind of work they do, that keeps them in the lead and makes them the combination you should buy.

THE WESTERN GYRATING CLEANER is built especially for separating corn from cobs as they come from the sheller, and recleaning corn and oats, but it is a

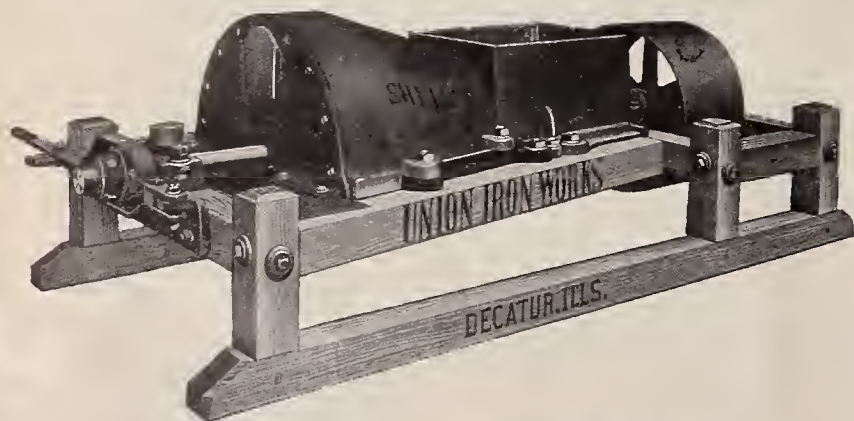
most excellent wheat and small grain cleaner, when fitted with extra screens furnished for this purpose. When you buy a WESTERN Cleaner, you get two machines for the price of one.

THE WESTERN SHELLER is strong and durable, made to fit all conditions. It has solid, full-turn conveyor feeders, making a positive feed; wide flaring hoppers, giving greater capacity and affording no possibility of corn bridging; patent adjusting lever, enabling the operator to instantly adjust the cylinder while running to all kinds and conditions of corn; shelling parts all subjected to our special chilling process, making them harder than steel;



The Western Gyrating Cleaner

frames—of seasoned hard wood; discharges—either direction, right or left, under or over. Large stock—all sizes for immediate shipment.



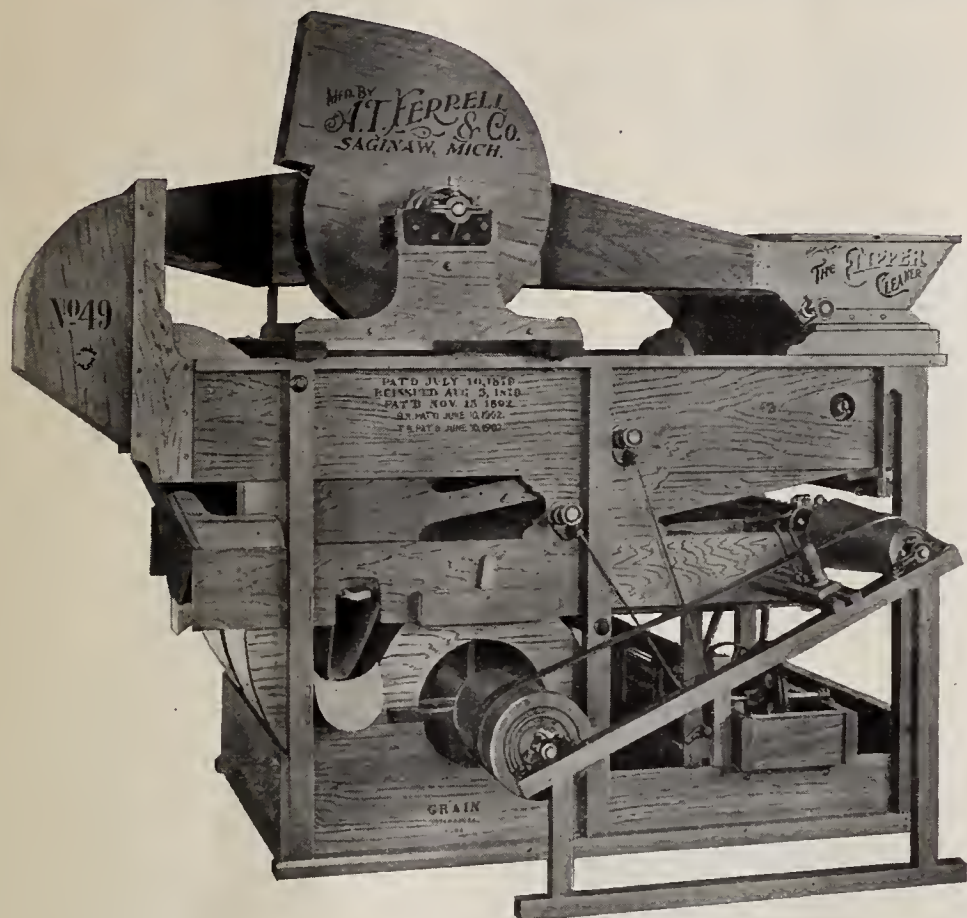
The Western Regular Warehouse Sheller

Get our catalog of the WESTERN line of Shellers, Cleaners and Grain Elevator Machinery.

UNION IRON WORKS, Decatur, Ill.

1221-1223 Union Avenue, KANSAS CITY, MO.

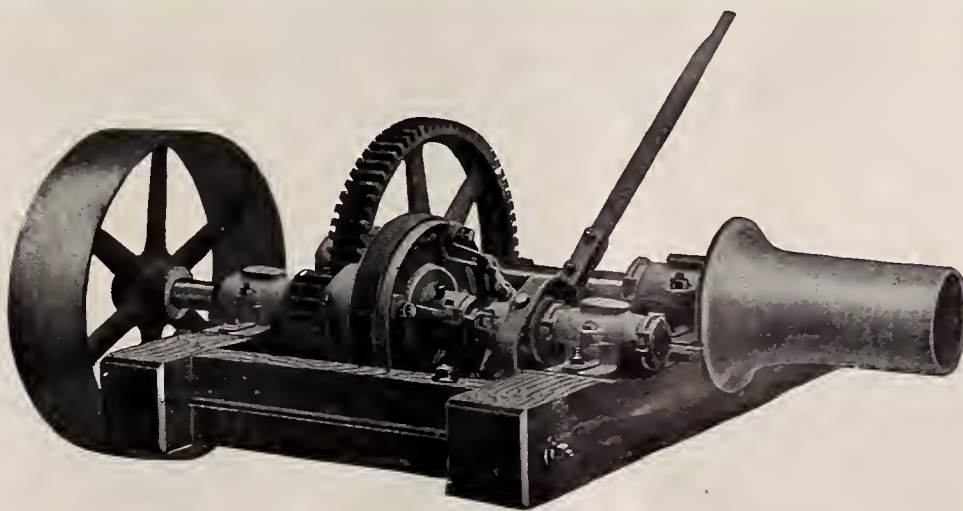
"Clipper" Grain and Seed Cleaners



The No. 49 Clipper is a first-class grain receiving cleaner for local elevators. It has large capacity, is solidly built, is dustless and will make the most difficult separations. It is simple, strong, convenient and will not easily get out of order. It requires less for repairs than any other grain cleaner on the market and is always ready for business. Ours is the only successful combination cleaner on the market. We give a 30-day guarantee with each machine.

If you are looking for the best cleaner, we would like to show you what we have. Our line of clover seed cleaners is strictly up-to-date. All sizes and capacity. We can furnish machines with Traveling Brushes, Air Controller and all modern improvements. Send for catalog and discounts.

A. T. FERRELL & CO., - SAGINAW, MICH.



15 to 20 Loaded Cars

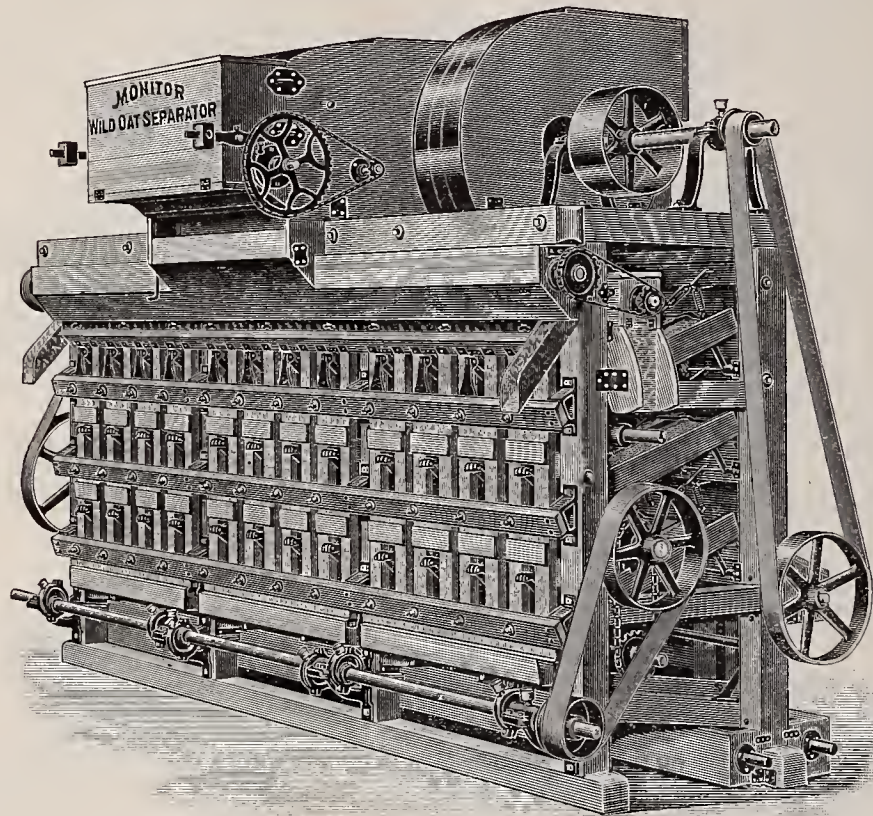
on level track can be handled at one time by the **No. 3 N. & M. Co. Friction Clutch Car Puller**. These pullers can be built either horizontal or vertical and for much smaller capacities, if desired. They are made in three types—plain without clutch; with jaw clutch and with friction clutch. The illustration shows what the horizontal puller looks like. Our catalog tells you all about them.

WRITE FOR IT.

Nordyke & Marmon Company

America's Leading Mill Builders
INDIANAPOLIS, IND.

MONITOR OAT EXTRACTOR



Patented

New
1912
Model

The Machine Wonderful

**When Its Work Is Done There Are No Oats In
The Wheat and---There Is No Wheat In The Oats**

This machine is proving a wonder to dealers of grain who have mixtures of wheat and oats, wheat and barley or wheat and rye to handle. It is a teetotally different machine than anything you have ever seen, and one that will do better work and do it more economically than anything produced heretofore.

We know positively that you never saw oats separated from wheat without a sacrifice of some good wheat—and usually it is the large, plump kernels which are lost. You may doubt our veracity when we say this new "Monitor" Oat Extractor makes perfect separations and that after the operation there are no oats in the wheat, and no wheat in the oats. It does not matter if you are handling spring, winter or durum wheat, we can guarantee you the same results. Suppose you send us a quart sample of about the average mixtures which you have to contend with, we will make a test here with one of these machines and return the samples to you, showing you precisely what we can do on your own floors. You will want the machine when you see the samples, and we will send it along and allow you to try it out for thirty days. Before the thirty days' trial is up and time of acceptance has expired, it will partly have paid for itself. Get busy now as we are having an enormous call for these machines.

HUNTLEY MFG. CO., Silver Creek, N. Y.

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Chicago, Ill.—F. M. Smith, 501 Traders Building
Portland, Ore.—C. J. Groat, 601 Concord Building
Wichita, Kansas—J. B. Ruthrauff, 301 S. Lawrence St.

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The American Elevator and Grain Trade

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

VOL. XXXI.

CHICAGO, ILLINOIS, JULY 15, 1912.

No. 1.

A NEW REINFORCED CONCRETE ELEVATOR IN ST. LOUIS, MO.

The elevator shown in our illustration is the property of the Saxony Mills Company, St. Louis, Mo., and was built for the purpose of storing wheat for the mill. It has a capacity of 100,000 bushels, divided into nineteen bins of various capacities. The ground space available made it necessary that the house should be built of unusually narrow construction. The elevator therefore is but 21 feet wide with a length of 101 feet. The bins are 80 feet deep.

The building is thoroughly fireproof, the foundations, walls, floors and roofs being built of reinforced concrete. The windows have sheet metal frames and sash glazed with wire glass. The doors are standard underwriters' type. The roof is covered with 3-ply tar felt and gravel and the downspouts are of copper.

Grain is received from cars on both sides of the elevator, being unloaded with two pairs of Clark Shovels into two track hoppers which reach the receiving leg by means of steel spouts. The receiving leg discharges into a 1,500-bushel scale hopper equipped with Fairbanks-Morse Scale. Thence the grain is discharged, either into the lofter leg which distributes the grain throughout the house; by direct spouts into two-thirds of the bins; and by means of 12-inch screw conveyor for the remainder of the bins; or into the mill leg which delivers the grain into a 12-inch screw conveyor connecting with four mill bins. From these four bins the grain passes through a 2,000-bushel automatic scale, which drops the grain on to an 18-inch belt conveyor leading into the mill. Grain from the storage bins is carried to the working end of the elevator by means of a 12-inch screw conveyor in a 6x6-foot tunnel. All of the storage bins are connected to this conveyor by means of steel spouts. All bin bottoms are hoppers.

The power is furnished by 50-horsepower General Electric Induction Type Motor. The drives in most cases are rope and are controlled by steel plate friction clutches. There is a two-drum car puller in the basement for pulling cars on the two tracks.

The spouting, etc., with the exception of the elevator buckets and screw conveyors, were furnished

by the Weller Mfg. Co. of Chicago. The elevator leg casings and boots were furnished by the American Sheet Metal & Machinery Co.

The Macdonald Engineering Co., 551 Monadnock Bldg., Chicago, were the engineers and contractors.

The Kansas report by Sec'y Coburn of the State Board says that, while last year's Kaffir area of

REDUCED TELEGRAPH TOLLS.

Effective July 1 important reductions of telegraph tolls have been made by both the W. U. and P. T. companies. Hitherto the companies graduated their rates upon distance so that a 10-word message cost from 25c to \$1, the country for the purposes of the rate schedule of the companies having been divided into zones; but it has at length dawned on the officials of the two companies that the difference in the area of transmission did not in all instances justify the tariff difference between 25 to 40 cents, with the result that a new schedule has been arranged fixing various zones throughout the country where messages can be sent for a tariff of 30 cents for ten words.

This reduction from 40 to 30 cents applies at every one of the 25,000 offices of the Western Union Company so far as certain other stations are concerned, according to an explanation of the new schedule obtained by the New York Times from General Manager Brooks and William Holmes, superintendent of the Tariff Bureau.

The Times says:

Mr. Holmes explained the working of the new schedule in detail. He stated that in Square 41, as the zone of which New York City is the center is known, there are 268 offices from which it will be possible under the new schedule to transmit messages to 709 offices to which the tariff was formerly fixed at 40 cents. The zone which contains Chicago has within its bounds 187 offices of the Western Union, each of which will have a 30-cent tariff to 570 places, to which the transmission cost is at present 40 cents. The area within which Philadelphia is situated contains 186 offices and will have a 30-cent transmission area of 911 different places for 30 cents, in addition to the 25-cent zone, which will be everywhere the same throughout the United States. The zone containing San Francisco has sixty-five offices and will have a 30-cent radius to eighty offices. The square which includes Boston contains 201 offices and will reach 243 points formerly fixed at a 40-cent tariff for 30 cents. The zone in which Washington, D. C., lies has only fifteen offices, but these will have a 30-cent radius, which takes in 744 different points. The tariff zone of which Pittsburgh is the center has 113 offices and will have 649 points within the reduced area.

The system has been worked out to give to every telegraph office of the company in the United States a number of important reductions in the long-distance tariff. The plan depends upon the number of offices within a certain number of zones or squares, so that the number of points affected is greater in the East, where there are more telegraph offices than on the Pacific Coast.

The announcement of the new arrangement was first put out by the Western Union, but the Postal



REINFORCED CONCRETE ELEVATOR OF SAXONY MILLS, ST. LOUIS, MO.
Macdonald Engineering Company, Chicago, Engineers and Contractors.

919,046 acres was the largest ever reported, the returns this year show an increase of 38.6 per cent over last year's, the planting being in forty-seven counties.

A. F. Campbell, formerly a newspaper owner of Brampton and M. P. for West Algoma from 1890 to 1894, has received the appointment of secretary of the Board of Grain Commissioners of Canada. Mr. Campbell gained some reputation as a platform orator in the interests of his party, and has also been closely connected with newspaper work throughout his career.

Company had already taken steps in the same direction; indeed, claiming to have led the way although it did not make any prior announcement of its intentions.

DEATH OF SECRETARY STONE.

After an illness from paralysis, extending over six weeks, during most of which time he was conscious, George Frederick Stone, serving his twenty-ninth year as secretary of the Chicago Board of Trade, died at his home in Evanston on June 21, in the 76th year of his age. He leaves a widow and a daughter.

George F. Stone was born of an old New England family, in Newburyport, Mass., on April 24, 1836. He inherited the traditions and acquired the edu-

to Boston, where he became associated with the house of Denny, Rice & Gardner. These connections, as well as his incidental service during this period as consul for the Central American states of Guatemala, Honduras and Nicaragua, and his comprehensive study of political economy, gave him that broad view of American international trade which ever after distinguished him. An American in the broadest and yet strictest sense, as a typical New Englander proud of his ancestry, he was a cosmopolitan in trade, and on all proper occasions when called upon to express his ideas of commerce and trade his voice was ever raised for its widest expansion and the broadest freedom, domestic and international. Commerce, in his mind, was the great universal civilizing and humanizing

of the customs and practices and traditions of the Board that had outlived their usefulness and their occasion were abolished and new rules called for by the trend of commerce in grain have been remade to meet the exigencies and requirements of the present time and current conditions of trade. A student of the course of commerce as it flowed through the Board of Trade, every abuse found in him an enemy and every device that, after careful study in the light of his broad experience and that of the experience of merchants the world over as known to him, seemed to him to be sound in principle found in him an advocate, the more forceful because his natural ability as a debater and public speaker was fortified by his habit of keen analyses of all business and commercial problems brought before him.

A ready and easy conversationalist, with a mind stored with apt quotations and delightful anecdotes, accessible at all times, democratic and courteous in all his intercourse with men, Mr. Stone's business opportunities for meeting men were but the unpremeditated means for daily enlarging the circle of his personal admirers and friends, whose attachment to him deepened and became all the firmer as the years rolled by. Mr. Stone, we may be sure, felt this attachment of the Board members to him personally, for they made no disguise of their feelings; but when on January 5, 1911, a complimentary dinner was given in view of his long service to the Board, the opportunity was given for full expression of their feelings, and the speakers vied with each other to express an admiration and attachment that was as genuine as its expression was the privilege of the speakers selected for that occasion; and it was an hour for blessed remembrance by Mr. Stone. And now that Mr. Stone has passed away, new meaning is given to the closing words of Mr. J. C. F. Merrill on that occasion, as true as the expression of the thought is beautiful:

"Astronomers tell us that so far distant is even the nearest star, if it were blotted out completely, its light would still shine in the heavens with undimmed lustre for many years. It can be as truly said of George F. Stone that long after he shall have gone from our midst, this Board will feel the inspiring influence of his personality, and will lean for support upon the splendid prestige and the power with which he has been so instrumental in endowing it."

The funeral of Mr. Stone took place at St. Mark's (Episcopal) Church on the afternoon of June 24, an hour in which every grain exchange in America was closed in his honor, as the Chicago Exchange had been closed the entire day.

The active pallbearers were selected from men in Mr. Stone's office. They were: Messrs. Blowney, Flint, Aitkins, West, Dexter and Stella. The honorary pallbearers were: H. W. Rogers, Joseph B. Hobbs, C. L. Hutchinson, C. L. Raymond, Z. R. Carter, R. S. Lyon, W. S. Warren, R. G. Chandler, W. S. Jackson, Walter Fitch, H. N. Sager, J. A. Bunnell, A. S. White, J. C. F. Merrill, Frank M. Bunch, William N. Eckhart, B. Frank Howard, Dr. W. A. Phillips, Dean J. H. Wigmore, Gen. J. B. Leake, William E. Stockton, Henry S. Robbins, I. P. Rumsey, F. E. Winans, T. C. Edwards, Edward Andrew, Frank V. Rice, A. O. Mason, A. E. Cross, Robert E. Tearse, E. F. Leland, William S. Dillon, C. B. Pierce, T. E. Cunningham, D. S. Lasier, L. F. Gates, John Garden, Robert McDougal, Joseph Simons, A. Gerstenberg, B. S. Wilson and L. H. Freeman. The body was taken to Newburyport for burial.

In Mr. Stone's honor the directors of the Board of Trade passed the following resolution, which was spread on the records of the Association:

This Board of Trade expresses deepest sorrow at his loss and sincere appreciation of his meritorious services and fidelity to this Association, of which he was an honored member and able defender.

Mr. Stone was a member of the Chicago Association of Commerce, whose ways and means committee adopted the following:

Whereas, death has taken from our midst that splendid and true man, George F. Stone; and



THE LATE GEORGE FREDERICK STONE.

cation, as well as achieved much of the beautiful and rich culture of New England, all of which united to make him not merely the clear-headed, efficient business man that he was, but to color his business life with the dignity of high-mindedness, the strength of unassailable integrity and the distinction that all innately honest, high and noble-minded cultured men throw around their personal vocations. No man who knew George F. Stone, his character and his processes of daily ratiocination would ever think of the Chicago Board of Trade as being what so many men have presumptuously called it, "a mere gambling house for speculators." He could no more have served an institution such as that for nearly a third of a century than he could have presided over a roulette wheel in a slum dive for the same number of years.

Mr. Stone's earlier manhood was spent at Melrose, Mass., a suburb of Boston, whence he removed

influence; and one notable address by him upon "International Commercial Relations," delivered before the Mexican newspaper men while on a visit to the United States, along about 1890, was widely circulated in both countries. It was, therefore, not merely his personal popularity, but his breadth of view and his readiness as an executive and as an advocate of sound business policy, that made him president of the Boston Corn Exchange in 1872 and 1873.

Seeking a wider field in the grain business he came to Chicago in 1874, and was an active operator on the Chicago Board of Trade until 1884, when he was elected secretary of the Association, an office he continued to hold by successive annual appointments until his death during his twenty-ninth year of service. His biography since would be little more than a history of the Board of Trade, to whose service he devoted his every energy; and it is to his initiative and suggestion that very many

Whereas, The Chicago Association of Commerce loses a valuable member and a genial associate; therefore, be it

Resolved, That the ways and means committee by these resolutions express our deepest sorrow at the loss of an associate whose sterling qualities of manhood endeared him to all; be it further

Resolved, That these resolutions be spread upon the records of this Association as a memorial of our love and respect for George F. Stone, as a man and a friend and a member of this Association, and that a copy of the same be sent to the members of his family.

NEW TRANSIT RULES.

The Commerce Commission on July 6 promulgated a decision in the "transit" case, which establishes new rules that will become effective on August 15. The order is substantially as follows:

That at the time of each shipment certificates shall be furnished by those shipping out of a transit house as to whether or not the commodity is entitled to a transit privilege, and also whether the commodity has or has not theretofore been accorded a transit privilege, and if any commodity entitled to a transit privilege has been mixed with the contents of a transit house such certificates shall be furnished as to each and every shipment therefrom.

A daily report from the transit house to the carrier or policing agent of the carrier, which report shall show at the close of business each day the classification of receipts and shipments of the total movement into and out of the transit house, if any of the commodity contained therein is to be accorded the right of transit, which report shall show all tonnage handled through the transit house as follows: All grain and grain products handled, point of origin of the grain and destination of the product, and whether received or forwarded by rail, boat, wagon or otherwise, which record must clearly show, in pounds, separately: Grain received by rail; grain received by boat; grain received by wagon; grain transferred from elevator to mill; grain products forwarded by rail (local or non-transit); grain products disposed of locally (by rail or wagon); grain products forwarded by rail (transit); grain products forwarded by boat (transit); grain products transferred; total tonnage on hand.

That there shall be recorded with the policing agent of said carriers, within a reasonable time after the shipment has been received at the transit point, all paid expense bills.

That the surplus billing—that is to say, all billing which does not represent grain actually on hand—shall be canceled absolutely at the close of each business day.

That transit privileges shall be extended only where the billing on the inbound movement shall show sufficient detail as to the character of the commodity; that is to say, the billing should state whether white corn, yellow corn, mixed corn, white oats, red oats, mixed oats, hard wheat, soft wheat, etc. And where the billing does not show this information, it must be accompanied by a certificate from some proper authority as to the specific nature of the inbound commodity prior to the time when said commodity may be forwarded on the transit privilege.

That no transit privilege shall be accorded except where the outbound billing shall show full reference to the inbound billing.

That transit privileges upon grain and grain products shall be extended for a period not exceeding one year from the date of expense bills, and that at the expiration of such period all such privileges shall absolutely cease, and that full local rates, commodity or class, shall be assessed for any movement of the commodity whatsoever, both for the movement into the transit point and the movement out of said transit point.

That in extending a transit privilege upon the products of wheat a daily reduction shall be made of 1 per cent of the weight of wheat inbound when said wheat has been manufactured at the transit point; that in extending a transit privilege upon malt there shall be a daily deduction from the inbound weight of the barley of 16 per cent; that in extending a transit privilege upon corn that has been dried at the transit point, there shall be a daily deduction from the weight of the corn of 10 per cent; that in extending a transit privilege upon corn which has been shelled at the transit point, there shall be a daily deduction of 20 per cent; that in extending a transit privilege upon the products of corn milled at the transit point, there shall be a daily deduction from the weight of the corn of 1 per cent; and that in extending a transit privilege upon grains that have been cleaned and clipped at the transit point, there shall be a daily deduction of 1½ per cent, the actual loss to be balanced and deducted at intervals not less than four times a year, quarterly.

That in according a transit privilege upon the products of grain milled in transit, including mixed feed, the policing authority shall be required to daily balance the outbound movement of the products against the inbound movement of the grain upon the basis of the well known average ratios of the products to the particular grain, the actual divisions to be balanced at intervals not less than four times a year, quarterly.

J. Rosenbaum Grain Co. received the first car of new winter wheat at Chicago this season on June 20. It came from Oklahoma, weighed 58½ lbs., graded No. 2 red and sold at \$1.09. The first car in

1911 was received June 26, from Missouri, graded No. 2 red and sold at 90c. First car in 1910 was received on June 29.

INSPECTION AT INDIANAPOLIS.

During the year 1911 there were inspected by the grain inspection department of the Indianapolis Board of Trade, under the supervision of its grain committee, a total of 23,955 cars of wheat, corn, oats and hay; and they were received at the Indianapolis market during that year 3,721,200 bushels of wheat, 19,513,800 bushels of corn, 5,979,000 bushels of oats and 1,626 cars of hay. A rough estimate places the value of this grain and hay at \$20,000,000. These figures are given to show that the grain inspection department, of which Samuel A. Holder was recently made chief inspector, is by no means an idle ward nor his office a sinecure. An increase as compared with the preceding year was shown in the receipts of wheat, corn and hay at the Indianapolis market in 1911, but there was a decrease in oats, as compared with 1910, because of a comparatively short crop of that cereal, caused by a drought. It might be proper to add here that Indianapolis as a grain



SAMUEL A. HOLDER.

market possesses decided advantages, by reason of its geographical situation and its exceptionally good railroad facilities, by virtue of which grain may be billed to and sold through the Indianapolis market and reconsigned to points beyond.

In view of this growing importance of the Indianapolis market the Board of Trade is making every effort to provide the facilities called for by the increasing trade; and has laid the corner stone by remodeling the inspection and weighing departments, which have been placed in charge of Samuel A. Holder, whose portrait appears herewith. Mr. Holder's experience in the inspection of grain dates from 1892. He was five years in the employ of Paddock, Hodge & Company of Toledo, Ohio, four years as sampler and special inspector of grain and one year as foreman of their elevator. In 1897 he accepted a position with the Toledo Produce Exchange as deputy grain inspector under E. H. Culver, chief inspector. For the last five years he held the appointment of assistant chief inspector of the same market. He resigned this position on June 10, 1912, to take up the duties of chief grain inspector and weighmaster of the Indianapolis Board of Trade.

In addition to being chief grain inspector, Mr. Holder is chief weighmaster, and in the latter capacity has supervision over all Board of Trade official weighers. A weighing department was inaugurated last November, and all of the weighers employed are under oath and bond. As a further feature of this work, the grain committee of the Board of Trade has employed the official scale in-

spector of the Indiana Grain Dealers' Association to examine regularly and test all scales used by the official weighers of the Board of Trade. A uniform weight certificate that gives complete details of the method of unloading, condition of car as to leaks, seal record, capacity of car, etc., was adopted last September, and it is recognized by railroads as competent evidence in cases of loss in transit.

The grain committee has jurisdiction over the weighers, as well as over the grain inspection department. It also prepares and reports to the governing committee of the Board of Trade the rules and regulations pertaining to the grain business of the Board and performs any other duties looking to the more perfect regulation of the grain trade and its development. Although only members of the Board of Trade are subject to these rules and regulations, it should be understood that all the millers and men directly engaged in the wholesale grain business in Indianapolis are members of the Board of Trade.

The members of the grain committee are elected by the governing committee of the Board of Trade for a period of one year, the terms of the present members expiring July 30 of this year. The present members of the committee are as follows: Bert A. Boyd, chairman; Gorge H. Evans, Horace E. Kinney, Harvey Mullins, James M. Brafford, Edward W. Bassett, E. K. Sheppard and E. Clifford Barrett. The chairman of the first grain committee was George E. Townley, elected in 1882, and the first chief grain inspector, elected in the same year, was Edward Dunn, who served until 1902, when he was succeeded by John Heiner. Mr. Heiner was succeeded by William Greiner, and Mr. Greiner in turn by Mr. Holder, the present incumbent.

COLORADO GRAIN DEALERS.

The annual meeting of the Colorado Grain Dealers' Association was held at Colorado Springs on June 13. President H. H. Seldomridge in his annual message reported the organization of the Denver Grain Exchange, the main purpose of which is to take jurisdiction over the trade functions of inspecting and weighing grain flowing into and through Colorado. He was followed by President McSwigan of the Denver Grain Exchange, who enlarged somewhat on the purposes of the Exchange, a summary of what appeared in these columns in the June number.

In the discussion that followed it appeared that the organization of the Denver Exchange would in all probability do all that has been expected of it; and its plans were heartily endorsed by the Omaha and Kansas City shippers to the Colorado markets. The Exchange inspection and weighing system as described by L. C. Hine, who superintends these operations, are quite equal in organization to any similar departments in the Mississippi Valley markets.

The following directors were chosen for the ensuing year: H. H. Seldomridge, Colorado Springs; J. R. Forsyth, Longmont; J. F. Sprengle, Pueblo; E. P. Conger, Trinidad; H. A. Robinson, Colorado Springs; T. L. Jamison, Trinidad; and the directors elected the following officers: H. H. Seldomridge, president; J. R. Forsyth, vice president; J. F. Sprengle, secretary; T. L. Jamison, treasurer.

It is said the first wheat ever shipped from America to foreign ports was loaded about 1740 at Baltimore in a British brigantine. It was a full cargo, bought in the back country of Maryland and hauled to Baltimore over the country roads, and was shipped by an Irish gentleman named Stevenson, who had lately settled at Baltimore. Its loading, shipment, and arrival at Bristol, England, created a great sensation at the time, and the wisdom of it and success of the venture caused these operations to be continued from time to time, says a writer in "Harper's Weekly." In the days of the famous "clipper" ships, a low tariff and local mills grinding winter wheat, from 1840 to 1860, Baltimore was also a great shipper of flour, to South America in particular.

COUNCIL OF GRAIN EXCHANGES.

SYNOPSIS OF THE PROCEEDINGS OF THE MIDSUMMER MEETING OF SPECIAL INTEREST TO GRAIN SHIPPERS.

The regular mid-year meeting of delegates of the Council of Grain Exchanges was held at Cedar Point, Ohio, on June 17 and 18. In some respects it was the most satisfactory meeting of this body ever held, the environment being particularly conducive to the conduct of a deliberative gathering of this character. There was a definite program, of course, but the work of the session followed closely along lines suggested by the address of President J. C. F. Merrill, the features of which may be greatly condensed, in substance as follows:

PRESIDENT'S REPORT CONDENSED.

Of the 25 grain exchanges of the country 18 (not including the Philadelphia Commercial Exchange) are now members of the Council.

The Uniform Rules Committee cannot report much progress, for obvious reasons, but has faith that in due time the reforms suggested by the committee will be approved by all the exchanges; and the committee will not cease its efforts to obtain the reforms desired.

The Publicity Committee has done a notable work in bringing to public notice the true character and economic purpose of the several grain exchanges.

The Uniform Grades Committee has proposed some changes in the Uniform Grades of the Grain Dealers' National Association.

The Crop Improvement Committee's work has broadened greatly and is now assuming "such gigantic proportions that it may be said with a considerable degree of certainty that only a few comparatively realize how important it is."

Action on the Lever (anti-option) bill and the McCumber (inspection) bill, as well as the ruling of the Pure Food Board on "misbranded grain," were referred to, matters the outcomes of which are familiar to the reader.

The abiding thought of President Merrill's address was, however, the commanding appeal to the grain exchanges to remember their duty in the matter of larger grain production, to the grain producing and grain marketing public and to the growing consuming population of the country, so vast a volume of whose food passes through the exchanges on its way from the grower to those who must eat to live. On this matter Mr. Merrill spoke as follows:

DOES THE COUNCIL PAY? IS IT WORTH ITS COST IN TIME AND MONEY? IS IT WORTH WHILE?

I am impelled to say something about this because of the high importance of our work and because there are influential interests represented in our membership, which by inaction indicate either a lack of confidence in our ability to do this work or a failure to understand the great and crying need of it, as well as the high privilege of participating in it. The importance of this work in its several branches can not be overestimated.

The great question is, will this organization rise to the unusual opportunity it has presented to it? The work is tremendous in its importance, vast in its area, and only an active, virile force will be efficient in coping with it. Fortunately, it is not complicated in its nature and requires no particular or technical knowledge to administer its fundamental or executive features. Energy and money rather than great executive knowledge are the requisites.

This organization is yet in its infancy. Like all creations, it must grow in efficiency or cease to exist. All substantial growth is moderate at best. It will gain strength to do large things through overcoming obstacles. It begins its career under flattering prospects of becoming a highly useful and beneficent body. Its progress has been as great as could have fairly been expected and at the same time have such substance as healthy growth can give.

That there have been complaints because of its inability to grow quickly of great stature, to be widely commanding influence, and speedily to right every wrong as viewed by individuals, is true and was but natural and the thing always to be expected. Expressions of this nature may always be expected regarding any body of men, no matter how efficient. Too much importance should not be paid to talk of this nature. That we have an abundant field and opportunity can not be questioned. The whole question rather is, Are we red blooded enough to do it?

The work now pressing upon us with strongest force is to help to increase largely the production of food necessities and the enlightenment of the people of all classes of our country with reference to the large service rendered by the exchanges in the distribution of farm products to consumers. Either of these tasks would be large by itself; together they make a work of heroic proportions. The work of helping less than six million farmers to raise the

food necessities of nearly 100 millions of people is well worth while. The work of educating the 100 millions of people [to understand] that the services of the exchanges is a needful service, an honorable one, that can not well be dispensed with, is also a large job. Let us take a little closer look at it in order to become better acquainted with the task we set ourselves to do; that is, unless we are "quitters."

When we look back but fifteen years and recognize that we then exported of foodstuffs in crude condition and food animals 25.2 per cent and of partly or wholly manufactured foodstuffs 24.66 per cent, or a total of 50 per cent of our production, and that in 1911 we exported of the products 5.13 per cent and 13.97 per cent respectively, or a total of 19 per cent, we can easily see, if we are to continue this rapid overtaking of production by consumption, how quickly we will be an importing instead of a self-sustaining nation.

A narrow look at a broad question is worse than no view of it whatever. It becomes us to take a comprehensive look at this question which has so much to do with our welfare as a Nation, as exchanges and as individuals. If we but recognize it and if we have good red American blood in our veins, we shall be willing to do our part and shall not supinely sit idly by with the consciousness that we shirk our responsibility as American citizens. The call of duty is in no mistaken terms. Shall we respond?

There are two reasons why we should be altogether willing to heed the call. The highest, loftiest reason why we should do this is that in rendering effectual aid in increasing agricultural production we rise to the high plane of a commanding position in a work of Nation-wide importance. If there is one reason better than another for man's right to exist it is that helping others is a worthy work. This is about the only service which makes the world just a little better for our having lived in it. Another reason why we should rise to this opportunity and really desire a place and have a part in the work is that first order of nature, self preservation.

Production has steadily increased largely in our country; thus far it has kept in advance of con-

men we should survey this great question, so prominently thrusting itself before us, and treat it in the broad and comprehensive way commensurate with its vast importance and generously respond with our service, with our influence, and reasonably well, at least, with our money, in a hearty and earnest support of it. It is, I repeat, among—if, indeed, it is not the greatest—of all important questions now demanding thoughtful attention and energetic action.

The poverty of understanding, which permeates all classes, of the great usefulness of the exchanges, there being no exception of note, is one of the amazing things to those entirely familiar with their work. It was James G. Blaine who once said, "The majority is the great unthinking class." This astute saying of the "Plumed Knight" was never more applicable than to the majority of our people relative to their opinion of the exchanges, especially some features of their activities.

It relates chiefly to transactions for future delivery. The educated and the unlettered classes alike clamor about what they are pleased to call "gambling in farm products." Legislators at Washington and at state capitals tell us that they do not wish to interfere with hedging transactions; yet, they say, they want to stop speculation, as if there could be hedging without a speculator. They further say, in justification of holding this opinion, that farmers and consumers both say that they think that gambling in the products of the farms and in the foodstuffs of the Nation is injurious and should be stopped. That this opinion is honestly held can not be doubted. Its sincerity, however, rests on a false understanding; rather, as before expressed, on poverty of understanding. That men of a high order of intelligence, including legislators, editors and clergymen, should be so utterly unable to analyze this subject is a matter of constant surprise to those whose every day familiarity with it in their business relations makes it simple and plain.

To be unable to understand that products can not exist without ownership; that ownership can not be separated from the incidental risk of ownership; that this risk is due to the vicissitudes of the seasons; and that it is as ethically right to eliminate this risk by passing it over to another who wishes



PRESIDENT MERRILL AND FORMER PRESIDENT H. N. SAGER.

sumption. But consumption has been rapidly overtaking production in recent years. Immigrants have come to our shores to the number of about 30 millions. Our population in 1900 was 77 millions; it now approximates 95 millions; and in 50 years it has increased to this from 31 millions. Fifty years in the life of a nation is but as a day; 31 millions of population is but as yesterday. If we project our vision into the future fifty years and use the past as our guide, the most startling conditions are revealed. If we had a surplus of 50 per cent of food stuffs fifteen years ago and last year had but 19 per cent, what may we expect fifteen years hence? To help increase production then becomes the duty of every man who is worthy of the name, and the duty of our entire population to assist in the work is an equal obligation. Every organization which survives because of soil production necessities is in duty bound to render efficient aid; not to do so is to become a leech.

Those who are engaged in handling farm products and in distributing these food necessities, by reason of the character of their work, are the natural and normal leaders in this movement among all commercial classes. Therefore, every exchange has an obligation which it must perform, if it would do its fair share; and I know of no good and sufficient reason for ignoring it, which may be offered in justification of inaction. We raise no question with those exchanges which elect to administer their own funds in their own way; but to sit supinely idle and flatter ourselves that we have nothing to do, that Government, either state or National, will do this work for us, is UNAMERICAN and UNWORTHY of American citizenship. The preservation of our individual business involves the very existence of the exchanges themselves. If the rapid decline in our exports is indicative of the rapidly declining surplus which leaves the locality in which it is grown, then the distribution of farm products will soon, comparatively speaking, be too small in volume even to keep the breath of life in the exchanges as primary markets. The only remedy for this is that which was herein pointed out as the way whereby an increased population may survive without importation.

Thus we have added to the work of loyal citizenship that of self interest. That this will prove the most commanding reason to many men is but an obedience to the instincts of nature; but as thinking

to assume it as it is right to pass the liability of loss of property by fire or shipwreck over to an insurance company, seems to be unrecognizable to a large proportion of intelligent people. That the habit most of our critics have of calling all future delivery trading "gambling in farm products," is another evidence of poverty of understanding of the subject. To classify the most careful research for information in its fullest detail relative to stocks of a given commodity here and abroad, the condition of growing crops and the total needs of the world, with games of chance, or with anything which has an even chance to happen or not to happen, and declare it to be gambling, is not complimentary to the understanding of those who use that term in this connection. The studied effort that the major part of the public press of the day constantly makes to feature the spectacular is a fruitful source of this injustice. It seldom comments upon the magnitude of the great flow of commerce. It is much too quiet and dignified to suit the purpose of the news gatherers. Rather, those episodes which by the skillful art of the editor can be touched up into high lights calculated to attract quick attention are much preferred.

It is well known that public opinion is the strongest force in all the world but one. Public opinion is the dominating force at all times and never yields its dominant sway over the will of the people until truth proves it error. So truth becomes the strongest force in the ultimate. Having this in mind, our course with regard to the opinion of the public of the exchanges and the ethics of their practices is clearly defined. Just as an individual seeks to clear his name and reputation of slander or false charges, so the exchanges have a duty to perform of the same nature, if they would have the consciousness of well performed duty in defending a good name—a name known to be entitled to the respect of all, without qualification. That it is the duty of the Council to carry forward a campaign of education of this nature and for the reasons given, together with others not named, is an undeniable fact, in my judgment.

I would not be understood as indicating that I have fully covered the ground in discussing at this time sufficient reasons why the Council of Grain Exchanges is well worth while, why it does pay and why no thought should be entertained by any of its

members of withdrawing from it. It should be counted a privilege as well as a duty to have a part in increasing our production to a safe margin beyond the necessities of our people. It is a work belonging to us, which we can not with self respect escape from; for, being conscious of its imperative necessity, it becomes a palpable duty.

Red-blooded manhood will dictate that we use every effort to displace false conception with truth, knowing that when truth becomes public opinion our position is secure and that victory will be ours.

With the high purpose of helping to create conditions which shall assure to our people permanent self-support through increased production, and with unflinching effort to eradicate erroneous conceptions of the character of our business, this Council of Grain Exchanges, conscious of its opportunity to render a great service to our country and at the same time to build the business of the exchanges on a firm foundation, should never question its high importance, but resolutely and with energy carry forward the work set for it to do.

The address made a profound impression on those who heard it.

Secretary Pickell's report was a summary of the activities of the executive body of the Council during the interval since the winter, or annual, meeting, important parts of which have been the appearances at Washington to forestall hostile legislation and executive procedure against the trade, and the efforts of the secretary and others to remove from the public mind prejudice against the exchanges in the exercise of their economic functions. In a more particular way, the following excerpt from the report has a personal interest to shippers:

In conformity with a resolution adopted at the January meeting of the Council, your president appointed a Uniform Rules Committee, the only permanent committee of this organization, with Henry L. Goemann as chairman. This committee formerly had been entitled the "Intermarket Agreement Committee." This committee has recommended the adoption of uniform rules, by the constituent exchanges of the Council: (1) providing for a margin clause covering cash grain transactions; (2) calendar days as a basis for shipping time; (3) the arbitration of differences in the market on the basis of which the trade is consummated; and (4) the adoption of uniform rules as to methods and manner of adjusting defaulted or delayed shipments, or over or under shipments of grain.

Treasurer W. M. Richardson of Philadelphia presented his semi-annual report, showing a working balance as follows: General fund, \$1,107.07; Crop Improvement Committee fund, \$5,441.60.

The reports were approved or referred to auditors.

PHILADELPHIA QUILTS.

Mr. Richardson took occasion in this connection to express his regret at the action of the Philadelphia Commercial Exchange in resigning its membership in the Council. Members of that Exchange who have attended meetings of this Council have on returning to Philadelphia

urged their friends, pleaded with their friends on the board, to reconsider this action. This action is wrong; it is unwise. It is not your loss, it is our loss. That is the way we feel about it. And I want to say that in your electing me treasurer of this Council I have appreciated the high honor conferred upon me and have tried to take care of the funds and keep the records in good shape. It has required some time and care, but it has been a pleasure; it has not been work for me; and, in concluding, I want to say, gentlemen, I have always found these meetings instructive, and have been very well repaid. One thing more, gentlemen: It is discouraging to make this report of the decision of the Exchange of which I am a member; but some one of these days, if it is in my power, we will be with you again. I don't want to go into the Philadelphia situation too far, but one of these days, I believe—and I think I can see a little distance in the future—one of these days we will be with you. I want to thank all of you for the kindness you have extended to me; and while Philadelphia may not be represented officially, I want to say to you that if I have the health and the time and the price, I am going to attend every meeting you hold, whether Philadelphia is a member or not.

THE BILL OF LADING LEGISLATION.

In the absence of Chas. England of Baltimore, chairman of the bill of lading committee, W. M. Hopkins of Chicago made a report on the status of legislation on that subject in Congress. The situation is rather mixed, as the bills before Congress are constantly changing form. In January it was the opinion of the experts that the Pomerene bill was the most complete and practical bill; and this is the bill, since improved by modifications, that the representatives of the great business interests of the country still favor and urge for passage. Mr. Hopkins recommended the Council to take action favoring the Pomerene bill so that its author may have that support in Congress.

Mr. Hopkins referred also to the "Pomerene Sub-

stitute Bill" which is now being urged by the National Traffic League as the best of all bills now before the Congress, but he seemed to doubt the wisdom of introducing it in the House. He said also that the Commerce Commission has decided to take up the bill of lading and give hearings on complaints of the "Uniform" bill (used north of the Ohio River) and the "Standard" bill (used in the South); and recommended the Council have a representative at those hearings.

UNIFORM RULES.

Henry L. Goemann of Toledo presented the report of the committee on uniform rules, as follows:

The committee begs to report that since the last meeting of the Council some little progress has been made, in that a few of the leading exchanges have adopted the calendar days clause.

The Chicago Board of Trade has adopted a calendar day rule, which, however, differs from the Grain Dealers' National Association rule, in that it makes the term of contract on which the sale is based read "from date of receipt of full shipping directions at point of shipment." There is, therefore, quite a difference between the Chicago Board of Trade's rule and the Grain Dealers' National Association rule, as the latter rule reads as follows:

"In making contracts, a specific time in which shipment or delivery is to be made shall be mentioned. Any given number of days shall mean calendar days excluding date of sale in which to load and ship grain to apply on a sale for shipment or to deliver at the agreed destination grain sold for delivery.

"The word 'ship' when used in the rules shall mean that shipping instructions shall have been filed with the railroad company by the shipper.

"Grain to apply on a sale for shipment must be actually loaded, and billing instructions must be

calls; regarding arbitration; regarding defaulted or delayed shipments; regarding excess or deficits in shipments. These four rules, however, the board of directors of the Chicago Board of Trade refused to recommend for a vote of their organization, therefore no action was taken upon them by their membership. In view of the fact that the smaller exchanges will not adopt general rules of this kind which vary from the established rules, unless the Chicago Board of Trade also adopts them, we find it very difficult to get the exchanges to adopt any amended rules; therefore, in order to get an expression from the membership at large of the Chicago Board of Trade it would be necessary to get one hundred signatures to a petition to their board of directors in order to bring the matter to a vote.

In addition to the above recommendations, it has been suggested to the committee that they recommended a rule regarding uniform commission rates; and also a rule regarding interest charge on consignments and purchases of cash grain; also, regarding the paying of telegraph and telephone messages by the seller of the grain, on inquiries, quotations, and orders for grain.

The chairman of this committee has been requested by dealers from different markets to try and get uniform rules passed covering the above points, as well as those previously recommended.

If the recollection of the chairman of this committee is correct, the first meeting of the federation of grain exchanges, or the preliminary meeting held at the Princess Theater, Chicago, in September, 1909, great stress was laid upon the benefits to be derived from a federation of exchanges in the way of good results as to the cash grain trade. The various delegates at that meeting, among whom were James Pettit of the Chicago Board of Trade, Frank G. Crowell of Kansas City, and others, expressed themselves very strongly upon the calling of margins on sales and purchases of cash grain for future delivery, and also that the securing of uniformity in trade rules would be worth every effort. I trust, therefore, that the importance of the various exchanges having uniform rules will be appreciated;



SEATED—H. A. PLUMB, C. F. MACDONALD, C. F. MAGNUSON. STANDING—W. M. RICHARDSON, A. G. TYNG, C. A. BROWN, A. S. DUMONT.

furnished the railroad company in accordance with the custom then in vogue at the shipping point.

"Where no specification as to time of shipment is named in the contract, ten days' shipment shall apply."

Minneapolis and also Milwaukee reckon the shipping time from the date shipping directions are received by the seller, while St. Louis and Kansas City are the same as the Grain Dealers' National Association. These are the only markets of whose rules I have copies.

You will note from this that while in a manner the rule as to calendar days is uniform, in that it eliminates holidays, it is not uniform as to the actual time in which to ship the grain; and on this point the rules of all exchanges should be uniform with that of the Grain Dealers' National Association.

The Chicago rule opens the question, "When were the shipping instructions received at point of shipment?" A man might mail a letter containing shipping instructions and that letter might be delayed in transit beyond the usual time, which quite often happens, as the service given by the Post Office Department has been very irregular; therefore, the object to be gained in knowing just when the contract expires as to shipping days would still be uncertain.

In addition to the markets which had previously adopted this rule, the New York Produce Exchange has adopted a similar rule, and the officers of the Philadelphia Commercial Exchange, also of the Buffalo Corn Exchange and the Detroit Board of Trade, now have in the hands of their committees the matter of the recommendation of adoption of this rule; and I trust that it will be adopted shortly.

In addition to the rule covering calendar days, your committee previously recommended the adoption of a rule whereby the members of all exchanges would be compelled to insert in all contracts a margin clause covering cash grain transactions for future shipment.

Also, that difference be arbitrated in the market on the basis of which the trade was consummated.

Also, that uniform rules be adopted as to the method and manner of adjusting defaulted or delayed shipments, or over or under shipments of grain, on contracts made for shipment.

The Chicago Board of Trade appointed a special committee, which committee recommended to the Board of Directors rules governing cash margin

because after all the cash grain business is really the basis of all the business of grain exchanges.

Referring again to the margin call, which in the judgment of the chairman of this committee is a very important matter, I have received a great many letters on this subject, and they all say that something ought to be done to stop the reckless selling ahead of grain without margin, especially new crop grain before it is harvested; and to show that this is not a tendency of the grain trade alone the Michigan Bean Jobbers' Association in a circular letter has gone on record as opposing very strongly the selling of beans for future delivery before the crop is harvested; and it is evident from this that the country dealer in beans has been injured to a considerable extent by this speculation without margin.

The lengthy discussion of the report closed with the following:

Mr. Murray: I am very much interested in Mr. Goemann's report with reference to trading on new grain—new crop grain. Just at this time of the year we are getting inquiries for bids from all through the oats territory for oats for August shipment. Personally, we discourage the business. We make no trades of that kind at all with country grain dealers for two reasons; first, the uncertainty that the dealer will be able to fill the contract in case the market goes against him; second, we have absolutely no knowledge of the quality of the grain. A wet harvest in the last few days may damage the brightest prospect. The proposition, it seems to me, invites unnecessary speculation on the part of the country dealer, and it ought to be discouraged by this body; possibly some resolution might well go into our records.

Mr. Tyng: I thoroughly agree with Mr. Murray in his statements. I think bidding for oats, corn, or any grain before it is matured is one of the greatest curses of the grain trade, and I would strongly favor a resolution by this body to discourage it. I think also that we ought to pass a resolution that steps should be taken by Mr. Goemann to have the Chicago directory pass this marginal clause. There is no question that if Chicago passes this rule the smaller markets will adopt it.

Messrs. Forbell of New York, Arnot of Chicago, Magnuson of Minneapolis and Dumont of Buffalo also condemned the practice of bidding for new

crop grain before it is harvested a pernicious practice. Report was approved.

ON EXCHANGE PUBLICITY.

In making a report for the Publicity Committee Chairman Merrill said Secretary Pickell had covered the ground so well—having been in charge of the secretarial work of the committee—that it was not necessary to go over the ground again. He added, however—

It is a stupendous task to educate and mold the opinion of, say nearly 100,000,000, or that portion of the population which is active; and it is a work which cannot be done in a day. We have diligently prosecuted it; and the surprise to me, more than anything else, has been that we have been able to accomplish so much. To get these fundamental statements printed in a million and a half of papers, so that they get into a million and a half of homes and offices, is a great work, one that we have accomplished. And we have tried to have those articles of a nature and character to attract attention; that once having attracted him they would interest the reader and that on reading them he would really have reason to believe he had secured some information. These little fundamental statements about production and quantity and risk and so on, simple as they are, are right before us every day; yet, as I said in my report, in quoting Mr. Blaine, the majority is "the great unthinking class." As a race we are creatures of impulse, not of thought, and we are creatures of habit rather than of independence; and so it is left to but a few to educate.

Now, we did not begin this work in time. It should have been begun years ago. We should never have allowed this erroneous conception of the great important work of the exchanges to so completely permeate public opinion; and so, again to refer to the importance of it, there is but one thing for us to do, and that is to go forward with the work, conscious that we are in the right and knowing that the right will prevail and that "the truth shall make us free."

After taking up certain minor matters, the session was adjourned.

SECOND SESSION—FIRST DAY.

The afternoon session opened with a report on changes in the "Uniform Grade Rules," recommended by E. H. Culver of the committee. (See p. 653, "American Elevator and Grain Trade" for June, 1912.)

A motion to adopt the report was met by Mr. Murray's substitute that the committee obtain from the exchanges an expression of the opinion of each as to the practicability of the amendments proposed.

The chair also suggested that the report would undoubtedly get before the Grain Dealers' National Association at the Norfolk meeting in October. He said also that he understood the new rules really came from or have the indorsement of the Bureau of Grain Standardization; and that as the trade is pledged to standardization of grain grades, he would recommend the postponement of any action at this time, and have the proposed changes submitted to the trade for consideration.

The report was ordered placed on file and copies sent the exchanges, and the committee continued.

THE POMERENE BILL.

Resuming consideration of the bill of lading committee's report, Mr. Hopkins of Chicago, in answer to an inquiry as to a method of procedure, said:

I thought, Mr. Chairman, without putting it into specific language, of a resolution in which we should emphasize two facts: first, that the business interests of the country—or, to put it more concretely, the grain exchanges of the country—should demand legislation which will enable us to secure a bill of lading suited to our requirements. I should put it no less than a demand. The second is that the bill now reported out by the Senate does not meet our requirements and that we are opposed to that bill; and, further, that the Pomerene "Substitute Bill" does meet our requirements and would give us the legislation that we require; and the Senators and Representatives should be urged to adopt that measure.

Mr. Arnot: I move that the Council concur in the recommendations made by the bill of lading committee, and that the committee be authorized to take such action as they may deem necessary to acquaint the law-making bodies with their recommendations in the name of this Council.

The motion was carried.

As to the hearings of the Commerce Commission on the "Uniform" and "Standard" bills of lading, it was ordered that each of the exchanges be asked to send representatives to the hearings when they take place.

UNIFORM TRADE RULES.

Resuming discussion of the Trade Rules Committee's report, Mr. Goemann said the committee would like to know, in the first place, on this "calendar

day" proposition, whether the rule as now adopted by the Chicago Board of Trade, or the rule which is in effect with the Grain Dealers' National Association, shall be the one for this organization to recommend.

Mr. Merrill explained briefly the difficulty and expense incident to getting a vote of the membership of the Chicago Board of Trade, in order that the Council, in considering the matter, might determine whether it were better to undertake to get the Chicago Board of Trade to change its attitude, or easier to have the smaller exchanges conform to the action taken by that body.

It was ordered that all the exchanges be asked to adopt the rule embodied in the Grain Dealers' National Association Trade Rules.

As to margins on cash transactions, it was moved that the committee should use every means in its power to induce the Chicago Board of Trade to adopt such a rule, requiring the margin clause to be inserted in every contract, thus giving either party to the contract the right to demand the posting of a margin whether that right be exercised or not.

On the arbitration rule Mr. Goemann moved that "we recommend that contracts entered into between the members of the different exchanges contain the clause that arbitration, if any, shall be under the rules of the market on the basis of which the trade was consummated." Carried.

On the question of defaulted or delayed shipments, the committee recommended that the recommendation of the Chicago Board of Trade submitted to their board of directors be the one that be adopted in the matter and that the committee be instructed to work out, asking the different exchanges to adopt it as a uniform rule. Carried.

A motion was adopted to recommend as a uniform rule the adoption of the Chicago rule as to telephone and telegraph charges, that the seller pay only for messages that bring orders.

CROP IMPROVEMENT WORK.

The remainder of the session was devoted to the report of the Crop Improvement Committee by Chairman J. C. Murray and Secretary Ball.

Mr. Murray's report was in part devoted to the "ways and means" problem of the committee. The committee asked for \$12,000; and to date the contributions have been \$10,450. The expenses are about \$800 per month, and the work of the committee and incidental expense are growing all the time. He sketched broadly the development of the work from an organization of grain men and millers to one involving railroads, colleges, universities, even the Department of Agriculture at Washington, so that now the committee's office is really the "clearing house for crop improvement work in the United States."

Many experiments have been tried out; and now the committee has settled down upon the "county organization" plan, which has been indorsed by all who have studied it and has brought to the committee the support of the Sears-Roebuck corporation with a large gift in money, \$100,000 of which is now available for distribution in units of \$1,000 per county. This plan, said Mr. Murray—

while, possibly, it did not originate in the mind of any member of our Council or committee, has been approved by your committee since the first knowledge we had of it. The plan started in Binghamton, New York. Broome was the first county to take it up—the idea of placing a local county expert to lay out the work in his own county and be responsible for the development in that county. From the moment that we investigated that idea we have been friendly to it, and we have advocated it to such an extent that even prior to the announcement of the Sears-Roebuck gift we had thirty-eight to forty counties corresponding with us on the subject of county organization, with the idea that they would put up their own funds without any assistance. They had no idea of getting any assistance from any outside organization at that time.

I think it well that I should tell you about the Sears-Roebuck gift. It came to us entirely unsolicited so far as we are concerned. Mr. Ball's publicity man, Mr. Carroll, was making some investigations as to the views of the value of this work and in calling upon a number of prominent business men in Chicago, he finally landed on Mr. Rosenwald of Sears, Roebuck & Company. The negotiations were very short. Mr. Rosenwald was impressed with the proposition almost from the time Mr. Carroll began the presentation of it and asked that Mr. Ball call and see him. On the following day Mr. Ball went to his office and gave him some further detail on this county organization plan, which, as you know,

is only one of the steps which we have favored and approved; and after thorough consideration Mr. Rosenwald was so fully impressed with the importance of this work that he called a meeting of his directors, who voted that a fund of \$100,000 should be available at once, at the rate of \$1,000 each to such counties as had formed and completed an organization which had sufficient indications of permanency to warrant our O. K. It is a part of our business to see that the county makes its organization strong enough at the time that this \$1,000 check is sent that it will be maintained after the first year is over without any outside assistance.

Up to the present time two checks have been sent out. Two counties have been organized and have received their checks. I think a third check is on the way to our office or is at our office in Chicago.

It is not a hasty proposition. We first have to see that the county is fully organized; that its business men and large landowners are fully impressed with the importance of the proposition. All this takes time on the part of Mr. Ball's office, to get the details tied up, and these things cannot be done in a week, or a day, or a month; and after that is done, the most important step is the procuring of the right man for that county, and that is one of the points on which our committee is active. We see that this local expert is absolutely satisfactory to the agricultural college in the state in which the county is located, and we investigate that man through every possible channel before we give him our O. K. for the work.

Then there is just one other point, to wit, that all of this work of organization is done by your committee. The Sears-Roebuck fund, or any other fund that we have had the advantage of up to the present time, including the Brewers' and Maltsters' fund for the barley work, as I stated before, has not contributed anything to overhead expense.

Mr. Murray continued with a statement of the way the committee's work has appealed to the colleges, whose initial pique and fear of becoming involved in "advertising schemes" is giving way to cooperation in the county work; to Rockefeller Endowment, which is turning to the North as it did to the cotton states; to the Bureau of Plant Industry, which also is desirous of cooperating to avoid needless duplications of the work. Washington, said Mr. Murray, "is willing to step back for the benefit of the work and allow the state agricultural colleges and authorities that are properly provided in the West to utilize their funds, their machinery, and have the whole proposition handled through the hands of the local authority. As a matter of harmonizing, it is about the prettiest thing I have ever seen worked out."

Mr. Murray spoke in complimentary terms of the work done independently by the Minneapolis Chamber of Commerce, St. Louis Grain Club, Milwaukee Chamber of Commerce, Omaha Grain Exchange, by Mr. Vincent of Baltimore in Maryland, and concluded by saying:

Some mention has been made in connection with our work that it should be done by the Government—that it is not the business of the grain men. There is a very good reason for not waiting for Government action on this. Of course, the primary reason is that we are interested in bigger yields of better grain, but we are also interested in this work being carried along on the best possible lines; and it is the feeling of this Committee that if the sentiment for this work comes from the outside rather than from some political body it will be a very much stronger proposition freed of all politics. Therefore, we would say that the grain exchanges can well afford to keep this work before the public so that it will be taken up on the cleanest and broadest possible lines; and I hope that when that sentiment comes to your notice you will feel as I do about it, that the cost is so light and the possibilities so great that we can well afford to carry it on through channels absolutely clear of all politics, free of all personal interests whatever, until it is taken up by the country—until the demand comes from the country; and then we hope it can be kept on a clean basis.

At the conclusion of Mr. Murray's report Mr. Ball gave a very comprehensive outline of the method followed by his office in furthering the work of the committee, tabulating the reports, statistics and records, to enable the committee to keep very close watch on the progress of the work.

Mr. Tyng moved that the report be received and placed on file, and that the thanks of the Council be extended to Messrs. Murray, Ball and Magnuson for the splendid work of last year.

Mr. Magnuson, on invitation of the chair, stated that up to the present time there had been some doubt in his mind as to whether the work could be developed in a practical way, but that he was very glad to say that when Mr. Ball was at Minneapolis, after organizing twenty counties, he began to feel it is practical and that there is no question about it now.

In response to requests from the chair various

members of the committee and others outlined briefly the work being done in their respective states. Mr. Riley, secretary of the Indiana Grain Dealers' Association, and Mr. Flesh of St. Louis, ex-president of the St. Louis Grain Club, told the meeting of the work of their respective organizations.

Mr. Goemann stated that it was the intention to undertake the improvement of grain in Michigan, and that the railroads had promised to furnish special trains and give what assistance they could, without expense to the Council. In Ohio trains had been run and some of the railroads had promised further assistance this fall.

Mr. Donahue of Milwaukee stated that to Prof. Moore of the Wisconsin University, more than to any other one man, credit was due for the success of the work in that state.

The President: Gentlemen, there is a question before the house. I don't think there will be any difference of opinion about it. Those in favor of Mr. Tyng's motion in support of the work of the Crop Improvement Committee, will so signify by saying "Aye." Contrary, "No." The motion prevails.

Thereupon the Council adjourned until Tuesday morning at 10 o'clock.

SECOND DAY'S SESSION.

The session was begun by the reading of a paper by Mr. Magnuson of Minneapolis on "Protection and Fairness of Grain Exchanges." The subject, as the speaker said, was one he had treated previously, but he hoped to throw some new light on the matters involved. The general tenor of the address is indicated by the resolutions following, which were the basis of the argument of the paper. At the conclusion of the paper, Mr. Magnuson moved the adoption of the resolution, as follows:

Resolved, That the Council of Grain Exchanges recommend to the individual exchanges constituting this body the adoption of the following:

(1) That offers to buy or sell large quantities of grain or seeds for future delivery with the limitation requiring the buyer or seller to purchase or sell the entire amount offered, is not permissible and is hereby forbidden. All such bids or offers to buy or sell grain or seeds must be open for acceptance by any members in lots of 5,000 bushels or multiples thereof.

(2) That the making of pretended or fictitious offers to buy or sell futures in pit trading is uncommercial conduct and hereby forbidden, the purpose of this resolution being to put an end to all bids or offers which are not made in good faith, and intended to be carried out if accepted.

(3) That the rules of exchanges be so amended that one particular grade is the contract grade deliverable on future contracts on a basis of the future month's price; that all other grades made deliverable be deliverable at a fixed depreciation in value per bushel, based on the commercial value, with a penalty of not to exceed two (2) cents a bushel of its actual value as arrived at by a series of years' average to be taken into account before the establishing of the basis.

After some debate part (3) of the proposition was referred to a committee to be appointed on future trading; (2) was laid on the table, being already in force in the various exchanges. As to (1) Mr. Aylsworth of Kansas City offered the following substitute, which was adopted:

Resolved, That each exchange trading in futures be requested to appoint one of its members as a member of a committee [of this Council] to cooperate with the committee appointed by the Millers' National Federation; and that the committee have power to increase its membership as it [shall] deem wise or prudent.

THE FOOD AND DRUGS ACT.

The chair said the execution of the food and drugs act as applied to natural grain is receiving the attention of the Council's officers, adding that should the authorities make any move in the administration of the act contrary to our interests—

It will then be a proper time for the Council or the grain interests of the country to take up the matter of amending the law itself so that it shall exempt agricultural products in their natural form. That is the only amendment I think that we want. That is the substance of the administration ruling, and it is giving us all the relief that we require. I think without taking up time over that, a motion to defer the matter until such time as the administrative board shall make further rulings is all that is necessary, and we will so dispose of the question.

The matter was so disposed of.

STANDARDIZATION OF GRAIN.

Passing several tentative items on the program, the chair introduced Dr. W. T. Duvel of Washington, who spoke the latest word on the standardization of grain, as follows:

Mr. President and Members of the Association: I will say only a few words on this subject this morning. When the grain men were in Washington some time in March this matter was discussed fully at your meeting, and I also had the pleasure of discussing it privately with a number of members of the Council. As I said then and had said before, we are getting our data together that we have collected for a number of years, and before any definite action is taken by our Bureau we want to do it in connection with the trade. In other words, we want to give the members of the Council and of the grain trade associations an opportunity to express their views on the results of our findings. I had hoped to be able to present some of that matter here today, to show you some of the factors which we were working with in connection with corn primarily, but we have not been able to get it together up to this time. I hope to be able to bring that before the Grain Dealers' National Association at the October meeting at Norfolk—to have our data complete, to show the various factors that the trade takes into consideration in the trading and buying of grain, to show the condition of corn as it is received at country points and its condition at various markets. I will also say that in fixing these grades there are several factors that we will keep in mind.

One is that we must recognize that in our corn there has been a great demand in the last few years for increased yields. Increased yields in many cases, unfortunately, have been due to increased moisture content and not increased feeding value. Consequently, we have the methods of handling and storing grain on the farm. They are not what they should be. Grain goes to the country elevator not in proper condition for market, and there is only one inevitable result and that is the result we have had for the last four or five years—before the grain reaches the consumer it is badly damaged and out of condition.

As a good illustration of that, I might say that we bought in Illinois this year a carload of corn to use for feeding test in connection with this question of the value of damaged and deteriorated corn. That corn was shelled on the 10th of April. It tested slightly under 19 per cent moisture and we picked out of that corn at the time of shelling a little more than 8 per cent of cob-rotten corn, showing that it was better than the average grade of commercial corn. Yet, when that car arrived at Baltimore, where we were making storage experiments, the corn was musty with that short shipment. Now, that corn has been held on the track in the car. It was a bulk-headed car, weighing 1,050 bushels at the time of loading, 350 bushels in each lot. The first lot was held on track until the maximum temperature was 112 degrees. It was taken out and weighed and held for test. I think it was in the car about two weeks. The next lot was held on track some little time longer, but the temperature stood for more than two weeks above 130 degrees. The third lot is still in the car, badly damaged and rotten corn, yet not as bad as hundreds of bushels that you see in the trade today.

Now, those are the four or five lots of corn that we are going to use in our feeding test to determine the relative feeding value of deteriorated corn. My intention was to bring some of the samples here to show you, but I have neglected to do so. So in that test we will have a cob-rotten corn; good, sound corn; and these three lots of heat-damaged, deteriorated corn. We intend to feed those to hogs, cattle, sheep and poultry so that when we get through with them we will know something concerning the feeding value of the different grades of damaged corn. That feeding test is going to be made complete in every detail, from the fattening value to the pathological effect on the animal; and I am planning to reserve samples enough of the corn so that by the time the feeding test is over every grain exchange in this country can have a sample of the corn so that they will know what we are feeding.

We are also making chemical analyses of those samples from time to time. We expect to make a chemical analysis once a week throughout the test of the corn itself, to know what change takes place there.

In this place I might also say, in connection with the sulphuring of oats, that Secretary Wilson has directed that we make a feeding test of sulphured oats and unsulphured oats, which test we will make some time later in the season.

The President: There was one such test made, was there not, and the Government has issued a bulletin thereon?

Dr. Duvel: Not so far as I know. We made a test of the methods of conducting sulphur test and whether or not horses would eat sulphured oats. That was just a preliminary experiment. We found that they would eat the sulphured oats as readily as they would the unsulphured oats. What effect these oats have on the animals I do not know and I do not know as any one knows.

The President: I have procured several copies of a bulletin issued by the Department of Agriculture, issued at intervals of four weeks, covering four feedings. The report is at some little length, and it states that a certain number of horses were fed for this length of time on natural oats—unsulphured oats—and an equal number were fed—I am speaking from memory now—on sulphured oats for the same length of time; that an equal number were fed at the double feed boxes, the half ration of each being sulphured and unsulphured in separate boxes before the horses at the same time. The report further states that at no point of the test was any injurious effect of any kind discovered; that the horses ate the sulphured oats as well as the unsulphured; and that those horses—ten of them—which had the double ration before them—that is, the half ration of each kind—would eat some of the sulphured oats first, some of them would eat the natural oats first, and then at once finish the others; and some of them would eat freely from one box and freely from the other. That was a very interesting thing to me;

and if it has not come to your attention I am sure you would like to know about it before completing your remarks in regard to the test that you are going to make.

Dr. Duvel: I am not familiar with the work done at Fort Pickens and I would be glad to look it up. That is a question I had hoped to stay away from because it hinges on the pure food act.

Mr. Goemann: May I make a suggestion? There is a difference, you know, in sulphuring oats; and some of us who sulphur oats put the oats through a cooler afterwards, taking out the moisture, and, therefore, my suggestion would be that you make tests with both classes of sulphured oats, those not cooled as well as the cooled, because you will find quite a difference in the two kinds.

Dr. Duvel: I am glad to have that suggestion of Mr. Goemann because we want to make this test complete, and when we make this test, the same as with the corn test, it is my wish that the trade shall know exactly what the test consists of and to let them have the results as soon as possible.

I do not know that there is anything further that I can say at this time. I will say, however, that there is no possibility, in connection with our standardization work, of our making grades in the near future on anything excepting corn. A committee from the Grain Dealers' National Association has been anxious for us to take up the grades of wheat and oats, but we do not feel that our data is sufficiently complete to justify us in doing that at this time. Whether or not we will be able to do it for this season is still an open question.

In response to Mr. Tyng's inquiry, if any test is being made for acidity in the tests of corn, Dr. Duvel stated he thought the acidity proposition undoubtedly was an important factor in corn and that it would probably have to be taken into consideration in fixing the grade; that it was of the utmost value to the elevator man who is storing corn and expects to store it for some weeks; that if he knew the temperature of the corn, the condition of the corn, and the acidity, he would know about how long that corn would keep in storage; that if the corn had an acidity of 26 and he expected to store it for two months, he could tell beforehand that at the end of two months he would have rejected corn.

Mr. Forbell asked if before the standardization of the grain grades is fixed the grain trade will be called in consultation, to which Dr. Duvel replied that the plan is to get the data together and ask the grain trade to appoint a committee to meet with them at some place wherever it may be convenient, Washington, of course, preferred by the Bureau, to thrash the matter out.

Mr. Forbell then stated that as he understood it, any proposed action by the Bureau would not be an arbitrary one, but that the grain trade would be called in consultation and a permanent basis arrived at as a result of the data of the Bureau and suggestions by the grain trade.

Dr. Duvel stated that that is the plan, so far as the Bureau is concerned; that they realize fully that there are trade conditions with which they are not entirely familiar and that these must be taken into consideration in fixing the grade; that it would be useless to make an arbitrary grade that could not be met in commercial conditions.

MORE ABOUT TRADE RULES.

The topic of uniform trade rules being resumed, Mr. Goemann spoke of the question of interest charges on advances on cash grain, and said, referring to the action of the Illinois Grain Dealers' Association on this same question, that "as far as the Council's committee go, we feel that interest should be charged on all advances on cash grain up to the time the weight is ascertained or the day following. That is, until the grain is unloaded or paid for."

The Chair: "Up to the time really that the money is received by the party advancing it."

Mr. Tyng said: "The dealers in Illinois are very much perplexed in their method of doing business. They sell to Chicago and St. Louis and pay interest; they sell to New York, Philadelphia, Cincinnati, and Louisville and pay no interest; and they are in doubt as to what to do in their business. They feel that a uniform method should be adopted. They themselves feel naturally that they prefer not to pay interest, and they referred it to the Council of Grain Exchanges for expression; and without taking too much time, I would like to ask if a roll call can not be made here and have the membership of the markets present state whether they charge interest or not. This is not a vote, just a record of what has been the custom."

There being no objection, the secretary proceeded to call the roll, which indicated that Minneapolis, Milwaukee, St. Louis, Chicago, Kansas City, Duluth, Baltimore and New York (on consignments) charge interest, while Detroit, Toledo, Peoria, Philadelphia and San Francisco charge no interest.

Mr. Donahue read a resolution passed by the Chamber of Commerce of Milwaukee, indicating that "any proposition having for its object the withdrawal of the right of the commission merchant or the track buyer at the terminal market to charge interest is opposed by the board of directors of the Chamber of Commerce of Milwaukee."

After some further discussion the chair announced as his understanding that the proposition before the Council was—

That on purchased grain the interest charge terminates on the date of inspection; on consigned grain on the day following that the grain is collected for.

After some further discussion the statement was amended to read:

That interest be charged on all shipments f. o. b. shipper's station based on destination and terminal markets, and on consigned grain to take effect the date after the weight ticket is received.

The requests embodied in the Illinois Association resolutions (see p. 667, June number) on uniform car-condition certificates and that of the Federation of Grain Associations to similar effect were referred back to those bodies with the request that a specific form of certificate be submitted.

NEW TREASURER.

Treasurer Richardson's report as treasurer having been approved by the auditing committee, and Mr. Richardson, by the withdrawal of his exchange, being no longer a member of the Council, President Merrill said:

Under the Constitution the only proper method would be the appointment of a treasurer for the remainder of the fiscal year; but inasmuch as the Council is here in convention, the president would like to be guided by the Council; and I may perhaps be permitted to state a preference for an appointment from some exchange which is not prominently represented in the roster of officers or important places in committee work, and it would occur to the president that there is no exchange, perhaps, to which I would rather see this office go than to the Baltimore exchange. I would like to appoint Mr. Snyder, if he will accept the office, to the position of treasurer.

Mr. Snyder having agreed to accept, the appointment was made and approved by the Council. On motion of Mr. Sager a vote of thanks was given to Mr. Richardson for his services in the same capacity.

A motion was adopted providing that a resolution be drawn condemning the methods of irresponsible and incompetent "crop experts," the resolution to be drawn later and on being approved by the president be published as the sense of the Council.

The President: The president wants to convey to you his thanks and his most hearty appreciation of your attendance, of your courtesy here, and wants to express to you also his hearty appreciation of the good work that he believes we have done here yesterday and today. A motion to adjourn *sine die* is now in order.

On motion, the Council then adjourned *sine die*.

REPRESENTATIVES PRESENT.

The roll call showed the following exchanges represented at the meeting by the delegates named:

Baltimore.—F. A. Meyer and J. W. Snyder.

Buffalo Corn Exchange.—F. A. McLellan and E. T. Brown.

Chicago Board of Trade.—S. P. Arnot, J. C. F. Merrill, H. N. Sager, J. C. Murray, T. E. Cunningham and W. M. Hopkins.

Detroit Board of Trade.—A. S. Dumont.

Duluth Board of Trade.—W. J. McCabe and Chas. F. MacDonald.

Kansas City Board of Trade.—Geo. H. Davis and G. A. Aylsworth.

Milwaukee Chamber of Commerce.—P. P. Donahue and H. A. Plumb.

Minneapolis Chamber of Commerce.—C. A. Brown and C. A. Magnuson.

New York Produce Exchange.—L. W. Forbell.

Peoria Board of Trade.—A. G. Tyng.

Philadelphia Commercial Exchange.—W. M. Richardson.

St. Louis Merchants' Exchange.—John L. Messmore and E. M. Flesh.

Toledo Produce Exchange.—H. L. Goemann.

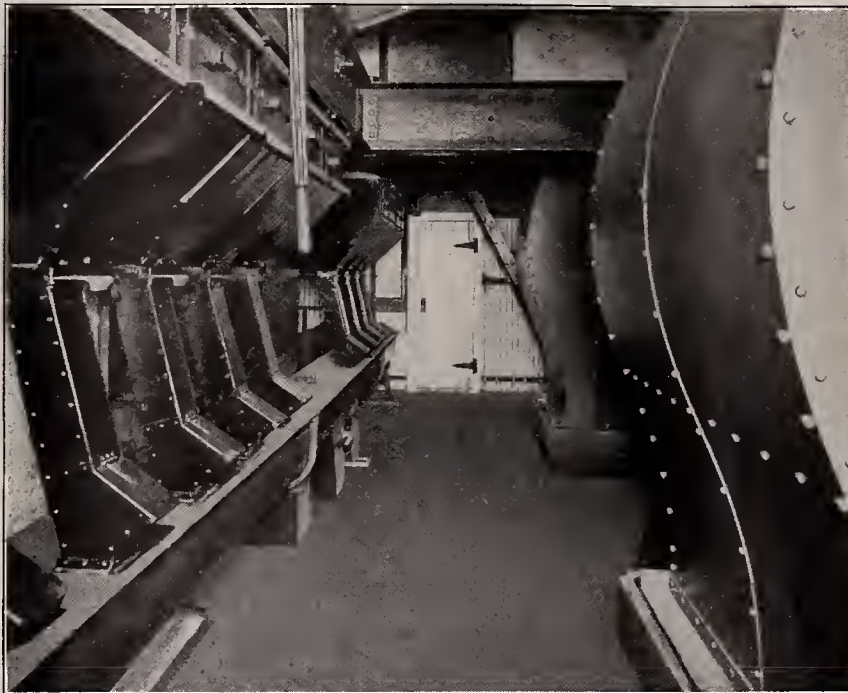
Among others in attendance at the meeting were:

J. Ralph Pickell, secretary of the Council; J. C. Murray, chairman of the Crop Improvement Committee; Bert Ball, secretary of the same body; C. B. Riley, secretary of the Indianapolis Grain Dealers' Association, and members of the trade press.

ROSENBAUM BROTHERS' DRIER, TOLEDO.

The foundations for the Rosenbaum Brothers' grain drying plant were laid late in the fall of 1911, and the complete plant placed in operation in the

deliver air to the drier and cooler. Both fans are lined on a single shaft and power is delivered over a rope drive by a Trenton Reeves Engine. All exhaust from this engine is piped directly to the coils, and the water of condensation is returned to the boilers by an automatic feed pump. Process patents covering the return of exhaust air from the drier and re-utilizing the heat contained therein have been incorporated in this plant. This process is a radical change over the old system and aids effectually in reducing the cost of operation.

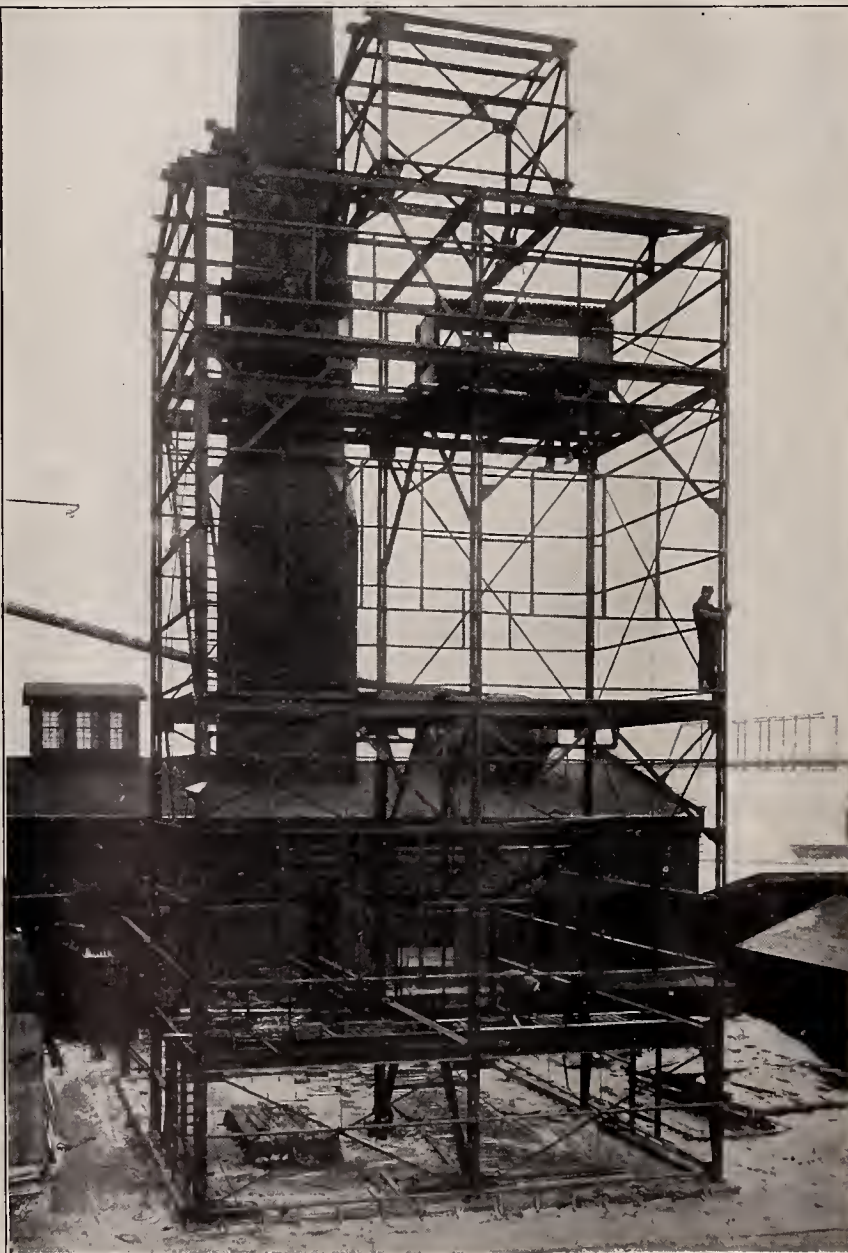


ROSENBAUM BROS.' DRIER, TOLEDO—TESTING FLOOR BELOW DRIER AND COOLER.

spring of 1912. The building is a steel structure with reinforced concrete floors and steel-tread stairs are used throughout. The complete contract was handled by the Ellis Drier Co. of Chicago.

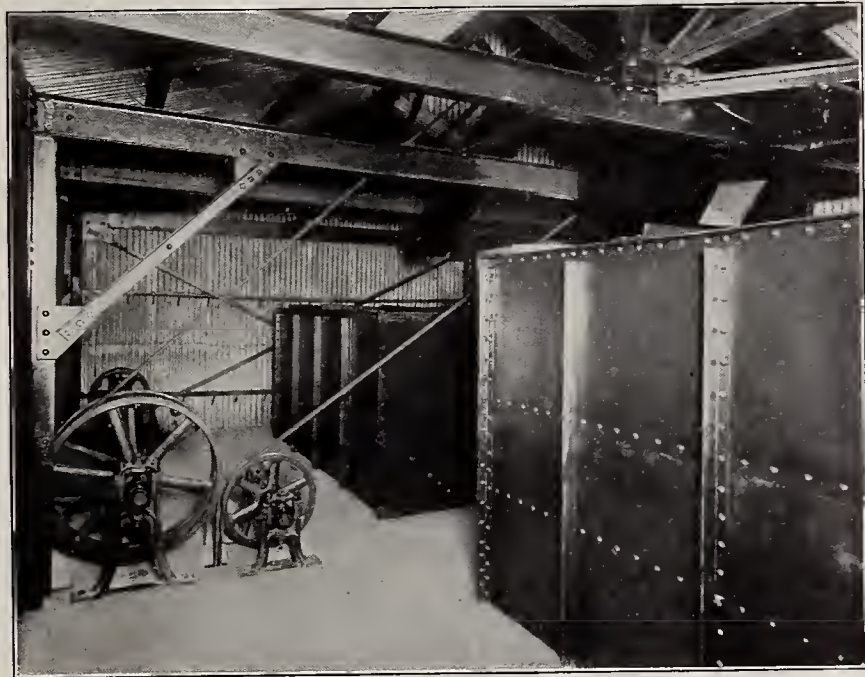
Two special multivane steel-plate full-housing fans

An exceptionally large independent cooler was installed in connection with this plant for the particular purpose of handling corn when only light drying is required. Just why it is necessary to have a large cooler when operating on this class of work is ex-



ROSENBAUM BROS.' DRIER, TOLEDO—STRUCTURAL STEEL IN PROCESS OF ERECTION.

above fact in mind, as the practice of high moisture reductions is rapidly declining, it being the growing opinion, and a correct one, that profit in drying is made in reducing the moisture content just enough to raise the grain a single grade, and it is not considered good practice to do more than that. The raising of the grade can be accomplished in the



diately he is confronted with insufficient cooling facilities; for the reason that whether you remove 7½ or 4 per cent of moisture the grain comes from the drier at practically the same temperature. In other words, even though the drier is capable of doubling its output when doing light work, the cooler, unless special provisions are made therefor,

SULPHURED OATS.

BLEACHED OATS AND BARLEY.

The Department of Agriculture has received numerous inquiries relative to the application of the food and drugs act to oats, barley, and other grains bleached with the fumes of sulphur. It appears that by this process grains which are damaged or of inferior quality may be made to resemble those of higher grade or quality and their weight increased by addition of water. Such products, therefore, are adulterated within the meaning of the food and drugs act of June 30, 1906, and can not be either manufactured or sold in the District of Columbia or in the territories, or transported or sold in interstate commerce.

It is represented, however, that grains which are weather stained or soil stained, the quality of which is in nowise injured in other respects, are sometimes bleached with sulphur fumes. Pending the report of the Referee Board of Consulting Scientific Experts as to the effect upon health of sulphur dioxide and the results of experiments being made by this department as to the effect of sulphur-bleached grains on animals, no objection will be made to traffic in sound and wholesome grains which have been bleached with sulphur dioxide and from which the excess water has been removed, provided that each and every package is plain labeled to show that the contents have been treated with sulphur dioxide. Bulk shipments should be properly designated on invoices. The terms "purified," "purified with sulphur," "processed," etc., are misleading and not proper designations for these products.

Attention is also called to the fact that grains bleached with sulphur fumes may have their germinating properties very seriously impaired.

"Speculative business in grains for the six months ending June 29 was characterized by light trading during the greater part of the time, especially in wheat, and by higher prices in all grains. Corn and oats attracted more attention than wheat during a good part of the time. The only important feature of the wheat market was the winter wheat crop scare, and the unprecedented loss in the soft winter wheat states. At the close the trade has the beginning of a spring wheat scare," says Chas. D. Michaels in the Inter-Ocean of July 1. "An enormous volume of cash grain was handled, receipts at Chicago aggregating 112,899,000 bu., a decrease of 10,743,000 bu. from the same time last year. Wheat receipts of 6,414,000 bu. decreased 926,000 bu.,

corn aggregated 60,000,000 bu., a loss of 2,153,000 bu.; oats 39,250,000 bu., a loss of 5,559,000 bu.; rye 797,000 bu., an increase of 289,000 bu. and barley 6,438,000 bu., a decrease of 2,394,000 bu. although the price of the latter was the highest on record, owing to the shortage in the crop last year."

The following interesting table was prepared for the Peoria convention of the Illinois Grain Dealers' Association by C. A. Russell of the Grain Standardization Laboratory at Decatur, but was not used owing to lack of time. It is intended to show the influence of moisture on the volume of corn measured in bushels by weight—how water swells the yield or total. It is nearly self-explanatory. For example, take a yield of 50 bushels of "bone-dry" corn (12% of moisture), containing 19% of moisture it would weigh out 54.3 bushels; with 28% of moisture it would weigh 61.1 bushels. Note the differences as the yield per acre increases at the rate of ten bushels per acre up to 100 bushels. Is it any wonder that farmers want to sell their soggy corn quickly, in the fall, as soon as dealers will take it, or that consumers refuse to take it except at a price that represents a certain proportion of water squeezed out?

The table follows:

CORN YIELDS PER ACRE IN BUS., AT DIFFERING MOISTURE
CONTENT.

12%	16%	19%	22%	25%	28%
50	52.4	54.3	56.4	58.7	61.1
60	62.9	65.2	68.0	70.4	73.3
70	73.3	76.1	79.0	82.1	85.5
80	83.8	86.9	90.3	93.9	97.7
90	94.3	97.8	101.5	105.6	110.0
100	104.8	108.7	112.8	117.3	122.0

FITZGERALD AUTOMATIC GRAIN OVER- FLOW ALARM.

Probably no other feature of the operation of a grain elevator causes more annoyance and loss than does overflowing bins. Choke-ups, burned belts and mixed grain are the immediate effects of an overflow, to say nothing of loss of time and other annoyances occasioned by this condition. Many serious fires in elevators are traceable to this cause and altogether the overflowing bin is a nuisance that has made life miserable for the elevator operator.

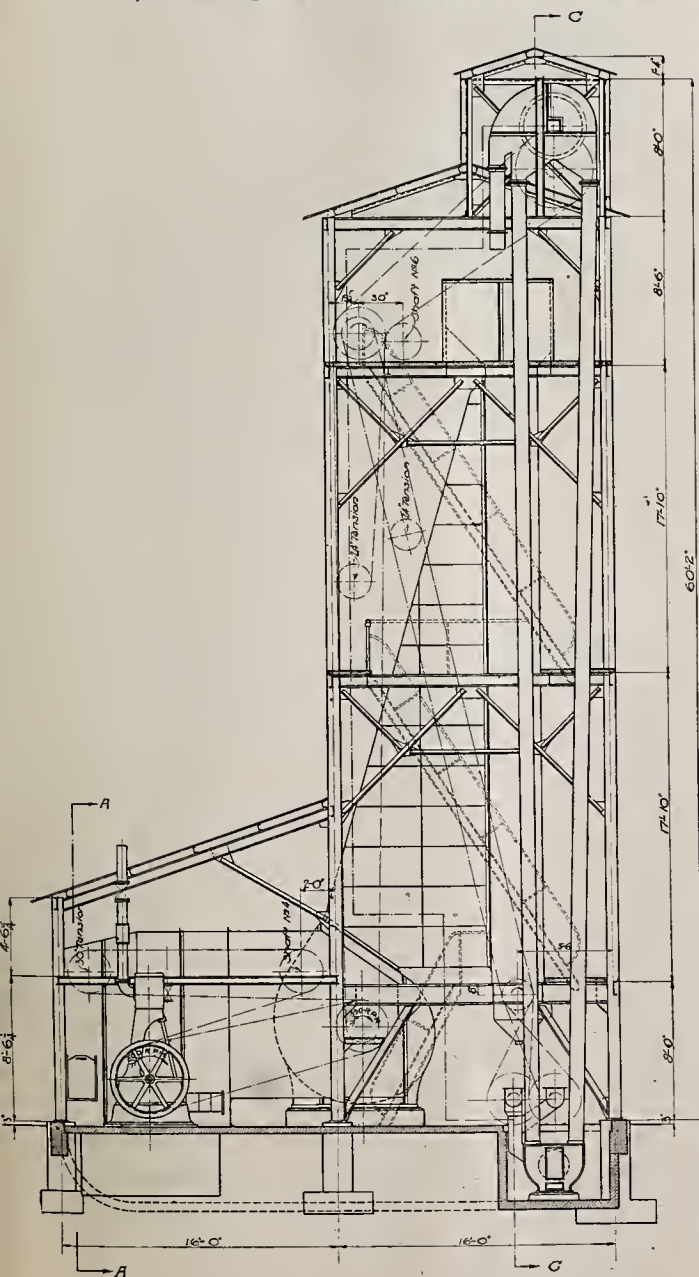
There has recently been patented and placed on the market a device which is designed to do away absolutely with this evil. It is the Fitzgerald Automatic Grain Overflow Alarm, manufactured by the Grain Elevator Specialties, Limited, of Winnipeg, Man., Canada.

It is claimed that this alarm will prevent the possibility of accidental mixing of grains and loss by waste, by positively preventing the clogging of the main or cup belt. As soon as the bin is full an alarm bell rings on the driveway, in the engine room or wherever placed for the convenience of the elevator operator. The bell will continue to ring until the cause is removed. In the meantime the overflowing grain returns to the pit, thus saving any loss from wasting or mixing of grains, and saving time, hard labor, trouble and worry.

The device is entirely automatic and cannot get out of order. It can be installed by any carpenter, at a nominal cost, and beyond the occasional renewal of a battery cell requires no attention whatever. Although it has been on the market but a short time, it is being installed by a number of elevator and milling companies in western Canada. These include the Northern Elevator Co., 55 houses; Atlas Elevator Co., 50; Security Elevator Co., 50; Western Canada Flour Mills Co., 85. In addition orders are being received every day from farmers' and independent elevators.

The Grain Elevator Specialties, Limited, will gladly furnish additional particulars to interested parties who will write, mentioning this paper.

The Kansas Flour Mills Co., operating eight mills in that state, with a daily output of 10,500 barrels of flour, own and operate 95 elevators in Kansas and five in Oklahoma, where are bought corn, oats and Kaffir as well as wheat.



cannot take care of more grain than the original guarantee provided for.

The intending purchaser will do well to bear the

INDIANA GRAIN DEALERS.

PROCEEDINGS OF THE ANNUAL MEETING OF THE STATE GRAIN DEALERS' ASSOCIATION AT INDIANAPOLIS.

The annual meeting of the Indiana Grain Dealers' Association at Indianapolis on June 14 and 15 was opened by President Chas. A. Ashpaugh, who in a short address reviewed broadly some of the work of the Association during the year: the part taken by the Association in having the drastic action of the Pure Food Board temporarily suspended, last March; success of the Association in the matter of grain door equipment, in April last; the conference on the natural shrinkage question, in May last; and the conference at Chicago with reference to obtaining reports of the physical condition of cars on their arrival out at Chicago, also in May. "It is the aim of this Association," concluded Mr. Ashpaugh, "to equip itself so thoroughly that its members need not go outside the Association for the securing of beneficial legislation, for protection against careless or indifferent railroads in the supplying of equipment, for the collection of claims, for the inspection of scales, for the adjustment of differences between shipper and receiver; in fact, it means to be to its members all that our combined wisdom may make it."

The chair then appointed the committees on resolutions and nominations and to audit the reports, with chairman, respectively, as follows: E. M. Wasmuth, P. E. Goodrich and Wm. Hayward.

SECRETARY'S REPORT.

Sec'y C. B. Riley made his annual report, which was as follows:

Meetings.—During the past six months there have been a less number of meetings held throughout the state than during the preceding six months. I have at times asked members for the privilege of calling meetings in their locality, and in many instances they have said there was no demand for them because there was so little business the members would not be interested enough to attend. However, we shall endeavor to provide for more meetings during the next six months.

I have attended meetings outside of the state as follows: At St. Louis and Washington, D. C., in the interest of the movement to obtain relief from the administration of the pure food and drugs act. Mr. Reynolds, as chairman of our legislative committee, will give you complete report of these meetings. President Ashpaugh and myself attended two meetings in Chicago recently, one upon the invitation of the Central Freight Ass'n to consider the question of natural shrinkage of grain in transit. At that meeting the National Ass'n, the Ohio, Illinois and Illinois Farmers' and Indiana Associations were represented, and all protested against any rule or tariff becoming effective that would provide for an allowance on account of natural shrinkage. The other meeting was at Chicago, with the Weighing Department of the Chicago Board of Trade, on the subject of car condition reports. At this meeting all of the Associations that were represented at the C. F. A. meeting were represented. After a full consideration of the present weighing and inspection system in force in Chicago, the representatives looked with favor upon a more complete system of car inspection and seal and car condition reports, all of which cost the patrons of that market something, the exact amount of which could not be definitely ascertained, but presumably about 25c per car in addition to the present fees for weighing. Mr. Foss, of the Weighing Bureau, was requested to submit a plan and an estimate of the cost, but up to this time we have not received it.

We recently had a hearing before the Railroad Commission of Indiana on the question of grain door allowances, having protested against certain tariffs becoming effective that omitted provisions for reimbursement of shippers for grain doors furnished by them. The result of this hearing was reported to you some time ago; but if any desire copies of the Commission's order, you will find them here on the Secretary's desk. I might say briefly that the Commission permitted the tariffs to become effective, upon certain conditions, but reserved jurisdiction of the case so they can modify or revoke the order any time should carriers fail to comply therewith. The Commissioners' order requires the Secretary of this Association to keep posted as to the action of the carriers in this matter and to report to the Commission from time to time any failure to keep a supply of car door material on hand. Therefore, I wish to urge each of you to report any dereliction or failure so we may be able to secure the service contemplated and otherwise perform our duty under the order of this Commission.

Legislation.—Mr. Reynolds, chairman of the legislative committee, will make full report and doubtless some recommendations as to our future legislative needs, but I may be permitted to suggest that in addition to proper amendments to both the Federal and state pure food and drugs laws, that seem to be necessary, we should have some legislation in this state regulative of public elevators and other elevators that accept grain on deposit with or without compensation. The banks, trust companies and building associations that accept the people's money

on deposit are required to make reports to proper authority and are subject to supervision and frequent examinations, all in the interest of the public that can not otherwise know the condition of such institutions. Under such a system, certificates of deposit in these institutions have value and holders have some protection. It is unnecessary to discuss the question fully; in fact, I have no definite plan or suggestion to offer, but I think the Association will do well to consider the matter and recommend to its legislative committee that proper action be taken.

Some amendments to the weights and measures law, enacted at the last session of the legislature, are desirable but not so important as they would be were it not for the work in our department of scale inspection; so I will not discuss that question further than to suggest it for your consideration and for the consideration of the legislative committee.

One other matter I think should be considered by your committee; that is, the question of weights by the carrier at both the shipping and unloading points. Some of the states have laws that provide that carriers shall install scales and weigh car-load freight at all stations where certain number of cars of freight are loaded per annum, and when they fail to thus provide weighing facilities they are compelled to accept shipper's weights and make delivery accordingly. If we had similar legislation in this state it would probably result in less trouble about weights and more legitimate claims for shortage would be paid. The law should also require carriers to supervise the weighing at the point of discharge or accept the weights there tendered except, of course, where actual fraud or incorrect weighing could be proven.

Markets Generally.—Last December I visited some of the Seaboard markets, at the instance of some of the shippers from this state, to investigate conditions there with reference to the inspection of corn. My report was published in the grain trade papers, and you have doubtless read it, so it will be unnecessary to go into the subject again; however, I think it proper to make some recommendations, for your consideration.

It seems to me, shippers should know what the rules of markets are as to inspection before contracting for deliveries to or under the terms of such markets. The Uniform Grades have accomplished much for the trade generally, but they do not govern in all the markets, and in the Seaboard markets are wholly disregarded, except where shippers to those markets specify in their contracts that Uniform Grades are to govern. This is especially true in Baltimore, where they have a dual system of inspection. That market has adopted the Uniform Grades, but in bidding for corn they wholly disregard them, in other words, they buy "Mixed Corn," the same as they did thirty years ago; and many of our shippers have been buying "3 Corn" under the Uniform Grades and selling "Mixed Corn" under the Baltimore grades. You might about as well buy "jackasses" and sell "thoroughbreds" and then tender your jackasses on the thoroughbred contract, as to do as you have been doing. However, if you people want to continue making such contracts, there is nothing but your creditors to hinder you, although it would seem the part of wisdom to sell the exact grades you buy. You will then have less cause to complain of the terminal market that applies your grain at a discount which you think much out of proportion to the real merits of the grain in question.

Some of our markets that operate under the Uniform Grade Rules assume the privilege of blowing grain into certain grades; this, too, without the inspection certificates showing any limitation as to the amount of blowing that shall be done to accomplish the purpose. It occurs to me that if such markets find it advantageous to both the seller and the buyer to blow the grain into condition their public rules should disclose the authority, and the inspector, or committee, that marks the order to blow should fix definitely the amount of blowing that shall be done; or, in other words, the inspector ordering the blowing should fix the exact per cent that should be blown out, otherwise the elevator, or concern that is favored with the order to "blow," may accept it as a carte blanche to blow the grain into the highest possible condition, or through error or inefficiency might blow it excessively. Since the cost of blowing and the loss incident thereto falls on the seller, and as he is dependent wholly upon the inspection department for his protection, we think definite and specific instructions as to per cents should be the basis for the order to blow.

Trade Rules.—At the last meeting of the National Association I presented the question of amending the Trade Rules so that buyers should be required to notify sellers promptly of the grade of their grain. It is well known to many that in the early part of the harvest season, particularly of wheat and oats, shippers are "at sea" as to the grade of their grain, and they frequently hasten a few cars into the markets as test cars that they may have a basis for future buying. Delays in reporting inspection on these forces the shipper to take a chance, and not infrequently he gets much of his grain on wheels before he actually knows how it will grade in any particular market that he may desire to patronize. Many other conditions arise that make it necessary for him to know how his grain grades, and to await the returns in due course means serious loss to him at times and prevents him trying other markets that might be more liberal. This matter of delay is not by any means indulged in by every receiver; but by many it is believed a trade rule that will require reports by wire or letter so that shippers may know within twenty-four hours from the time the car is inspected how it grades is a reasonable rule and should be adopted. If reasons develop later in the season for omitting this information as to cars that grade contract, it should not be omitted as to any car that fails to so grade. Your

business certainly embraces enough elements of risk now that cannot be overcome by rules, or otherwise, it would seem that such rules corrected by good practice should receive your attention and approval.

Arbitration Rules.—At the National Association meeting last year a resolution was adopted providing for a special committee to be appointed by that Association and the affiliated associations to review, revise and amend the Arbitration Rules in order that a more complete, uniform and perfect set of rules could be put in force. So far there has been no call for such meeting, and nothing has been accomplished so far as I am advised.

I think it advisable to authorize your President to appoint a committee to do this work, either in conjunction with the National and affiliated associations, or otherwise, if such associations fail to qualify, for our Rules can be greatly improved by a little work.

Arbitration is one of the important features of association work, but the Rules that are now in force were adopted many years ago when it was the policy for arbitrators to use their efforts to effect settlements by compromise, etc., while now we have our Trade Rules and other proper machinery for testing the merits of controversies. Therefore, with proper Arbitration Rules intelligently administered the trade can and will be greatly benefited by this most important feature of our association work.

The one arbitration case we had not completed at the last meeting has been completed by our committee and appealed to the National Association.

Our people are certainly to be complimented on their ability to settle their own affairs, since we have had but two cases during the past year and nothing is now pending.

Claims Department.—Since we opened our department for the collection of freight claims, we have filed 159 claims, ranging in amount from \$2 to \$166. Of these 86 have been paid; 17 declined and returned; and 56 are still under investigation. Some of our members are filing all of their claims through this department; others a part only; and a few, those they think are so complicated as to render them difficult and doubtful. We have returned to the claimants several claims that could not be verified and such as we knew would not be recognized by the carriers as legal liabilities.

We believe if our members would file all their claims through this department it would be greatly to their interest and ultimately result in a more complete recognition of our Association by the carriers; however, we cannot complain of the treatment accorded us by the carriers, as they have been courteous and generally satisfactory. Occasionally we find a claim department that has not learned of the progress in affairs generally and of railroad affairs in particular, but they are the exception; and we have hopes for them.

Scales.—Our scale testing department has proved highly satisfactory, not only to the Association but to the patrons as well. Our chief inspector, Mr. Hoffman, will make report later as to the work. I desire to say that Mr. Hoffman has equipped himself with a motor truck to use in his work; so this will facilitate the work and enable him to reach points otherwise inaccessible.

We have undertaken the inspection of the scales used in Indianapolis by receivers and will be glad to have you send us your complaints of weights here, if you should have any. We will investigate and try to find the trouble.

Treasurer Bert Boyd reported receipts of \$5,822.21 (including balance of \$429.88) and disbursements of \$4,956.79, leaving on hand cash to the amount of \$865.72.

The report of the board of managers, by E. M. Wasmuth, complimented the Association on the efficient work of the President and Secretary, who left nothing for the board to do except to employ a scale inspector and to establish the claims department—"these two things I think are very important, and the members should take advantage of them."

LEGISLATIVE COMMITTEE'S REPORT.

Chairman A. E. Reynolds presented the report of the legislative committee, prefacing the details of state work by a review of work of general character in which the Indiana Association and its officers took a leading part, such as the conferences at Washington upon the pure food act as applied to grain through the interpretation of the laws by the Board when under the chairmanship of Dr. Wiley. The local significance of the order by Sec'y Wilson as the result of that conference appears when it is recalled that the Indiana state laws is practically a duplicate of the Federal pure food act. Coming directly to state matters, Mr. Reynolds said:

We talk about laws in Indiana. You know very well that there are a good many laws in Indiana that are in a general way hostile to the grain trade in the state and to the grain trade in general. One of the most needed laws in Indiana is one properly regulating elevators. The present laws are for the public elevators. I don't know that they are of any particular benefit to those elevators, but I do think that there should be a law that will plainly and explicitly define the operation of all elevators. That is something for the Indiana Legislature to work out.

There should be a storage law that is more clearly defined and that will not allow every grain man to lay himself liable to fine. Every man that ships

out grain stored with him is laying himself liable under the present statutes of Indiana. There should be a law along this line. You take in corn in February; you know it is going to get hot in April; you ship it out. You are a felon under the laws of Indiana. There are, or have been, people in Indiana who solicited storage of farmers' grain for the purpose of getting it into their elevators, who then ship it out and get money to do business and who are not prepared to pay the farmer for the grain when he demands it. Legislation should protect the farmer as well as the elevator man. I want to say to you that it comes dangerously near being dishonest for a man to ship out grain and get the money and put himself in a position that he is not conveniently able to pay every dollar. I say it is not fair. It is one of the things that is likely to bring all grain people into disrepute.

Again, there should be a law, fair and reasonable to all parties, on weights and measures. I think uniform laws covering weights and measures is a very desirable thing; and 68 pounds of corn in Indiana are no more nearly a bushel than 70 pounds in Illinois. What is a bushel? What is the reason you buy 68 pounds for a bushel while the other man takes 70 pounds for a bushel?

What do we need most in a National way? We must have standardization of grain in this country; we are going to have standardization, just so sure as you are going to have any other class of legislation in Washington—it may be this year, or it may be five years hence. It will make No. 2 wheat No. 2 wheat in every market in the United States. The question of 19 per cent moisture in Baltimore and 19½ per cent in Chicago will be a dead issue—as dead as the Dred Scott decision. How are you going to bring this about, and how much of a finger is this Association going to have in bringing it about? This is one of the great needs in legislation of a National character. There will always be conflict between state and National legislation.

Forget all about the necessity of foreign markets in buying our grain. We don't care what becomes of the people across the water that want to buy our grain. Don't feel it is incumbent upon us to make our grain [standards] so high as to play into the hands of the foreign trade. We consume 95 per cent of the grain in this country; the foreigner will buy of us only when he has to and pay only the price he has to, never a penny more.

Now, I want to take up another question that is always difficult to touch on and that is uniform grades. What are you going to do with a law to control trading in grain? Who are the best people to formulate a law governing future trading in grain, the men down at Washington or you people that are continually up against the proposition, 365 days in a year? You cannot down this question. Every day the sun goes down there is added a new feature to this question. A law so universally demanded to reasonably control future trade in grain cannot be avoided. The only question for us to consider, then, is what hand are we to have in making that law? If you people cannot figure out this question, who is going to do it? It is up to you—up to the trade of the country. Don't get the idea that all the brains of the country go down to Washington; don't get that notion. Don't get the notion that the very best brains always go there. You will have to work this question out; and if you do not work it out, there are always forces that will work it out in the end and that may redound to your great detriment.

The bill of lading is the most important thing in the immediate viewpoint that we have to consider. The bill of lading is the document that represents the whole five billions of bushels of grain consigned each year—the document that helps you do your business—the commercial document that you could not do without. It is a document that always stands for something just out of your reach; for as soon as you have loaded a car of grain and it is out of your reach, around the corner, all you have left is that bill of lading, which represents your \$500 or \$1,000 that you have in the car. It gives you the assurance that somewhere or in some place or somehow, when your grain is out of sight, you are going to realize something on it. This is the contract that controls the transportation company that is going to move your stuff. And it is the rottenest document that is being put through a printing press at the present time. There is no obligation assumed by the transportation company; there is nothing but popular faith in it as a piece of commercial paper [behind it]. It says I may do what I want to do when the time comes. It has enabled the grain trade of this country to get millions of dollars out of the banks. It enables the railroad companies to keep money of the grain trade without paying interest. It has done everything that a rotten piece of paper could possibly do in the way of deceit and deception. What are you going to do about that? It can only be effectively controlled by National legislation.

Railroads are of necessity subject to Federal supervision. It is not possible for them to operate only in one state; therefore, the law to control the bill of lading must come from the Federal government. It must be such a document that will suit all the parties interested, such as the shipper, the receiver, the transportation company and the banker.

What do we as country grain shippers want in the bill of lading? We want a contract that says: "Car No. 3,640 is loaded with grain, by Alexander; that it contains certain number of pounds of corn; it is to be shipped to New York, and have the same amount of stuff in it there that was loaded in it in Indiana; and if it has not, the railroad company is responsible for what is short." I hand it up to you, is it not unreasonable to expect 1,000 bushels of grain to be loaded in Indiana and accept delivery of only 900 in Maryland? First of all, the railroad company will have to have better cars; and then they will have to have better men. They will have to have better safeguards in the handling of your grain.

To give you an idea, let's take a station handling 300 cars of grain in a year. I have known stations that handle more than 300 cars of grain a year and do a right good passengers business in addition; and have telegraph offices and have just one man to take care of each station, who gets \$55 per month. Now, why can they afford to have a \$55 man handle 300 cars of grain that is worth \$1,000 a car? Why can they have that man burdened with the selling of passenger tickets and with receiving and delivering messages? Above all, why can they have that man so enormously overpaid who holds in his hands the lives of so many human beings? It is preposterous. That man ought to be paid at least \$125 a month; they ought to have a telegraph operator and a freight checker and that freight checker should weigh every car of grain. You may carry it on down to the station where the man handles only 200 cars a year, or even down to 50 cars—could they get along with one man? Even take it down to ten cars; you say, one car even, that is worth \$1,000. Take any other line of business: the wholesale merchants that handle \$1,000 or \$10,000 worth of business each; they do not use such business methods. I want to say to you that our business is handled in the rottenest way of any business in the world, when it comes to handling and transportation of it. The railroad can handle it in a better way. But I will say, Mr. Railroad Man, that if you need money to do it you ought to have more money for it and I hope the time will come when we will get better service from the railroad and that the grain business will be more remunerative to the railroad companies.

I hope I have shown you the need of legislative activities in both state and National legislatures; but somebody has got to put up the money to do it, for it will take a great deal of money.

My other subject: ways and means which apply directly to the Indiana Grain Dealers' Association. All associations, from the local associations to the National association, have limitations and are bound around by the lack of means. There has never been one of them that has done what it could have done had it had the money to do with. This Association is no exception to the rule. You never have had enough money to properly execute the work before you. You have had your efficient secretaries from time to time, always working at the very minimum of existing wages. You have had your times of liberality, but most of the time we are most almighty stingy. You did mighty well when you put up \$600 to fight that food and drug act. The state of Indiana saved itself a million dollars. What would you have done with all this rotten grain? You would have had at least 70 per cent of it on hands. You made at least your customary margin of profit when you invested \$600, \$278 of which was used in fighting that act; therefore you made a good investment and saved that one million that you would have lost. You all know that you do not put enough money into this Association. As you say, there were fifty-five withdrawals. I say that any man in Indiana that is a grain dealer and does not belong to this Association is a parasite, because he is reaping the benefits of the Association in this state and yet is not contributing to its support. By the treasurer's report, you come out with a balance of about \$400 in the treasury, but you ought to have a margin of \$10,000, and then it would not be one-tenth of 1 per cent of your annual profits.

Now, I have told you of the legislative work that ought to be done, that you could do and ought to do. The time is at hand when the grain trade is making a complete turnover. The grain business now is a permanent one, and you are in the business because you think you have a permanent investment; but you are behind the times with the laws and the sinews to fight forces that are here all the time. It takes money. I am talking about your contributing to this Association and having a fund that will always be on hand for a campaign to draw from.

I think you all know something about what this Association has done. I am going to say to you that at the meeting of the board of managers they decided that the dues of this Association should be raised to \$15, but I believe that at this time the dues should be raised to at least \$12 for each member and \$6 extra for each additional elevator. This will put in the hands of the Board quite a little, and when you get used to paying \$12 you will not know the dues have been raised and may be willing to raise them to \$15. Never a dollar of our money has gone wrong; we have had no embezzlements. You cannot spend \$12 any place else in the business that will bring you as much good and profit as to invest in this Association.

Mr. Reynolds concluded by moving that, "beginning on July 1, 1912, the dues of this Association be fixed at \$12 for each membership and for members owning more than one elevator that \$6 for each additional elevator be charged, and that the Constitution and By-Laws be so amended as to conform to the provisions of this motion."

The motion was seconded by Mr. E. K. Sowash. It was discussed at length and when voted upon was carried by a three-fourths vote of all those present.

SCALE INSPECTION REPORT.

C. C. Hoffman, scale inspector for the Association, submitted the following report:

Since taking up the work of inspecting scales for the Association I have inspected 189 wagon, 45 hopper, 24 dormant, 42 flour sacking and 14 railroad. Out of the 314 scales inspected and tested, 161 were adjusted and 7 condemned; only 21 were found to be in excellent condition.

The pits of 73 scales were full of dirt and other

foreign matter. In one pit the dealer was raising a crop of corn.

The timber on 41 wagon scales had deteriorated and rotted to such an extent that the corner irons were not setting level.

The foundations of 21 wagon scales were in bad condition due to the walls, which mostly were made of brick, giving way.

The hoppers or bins of 11 scales out the 45 tested were binding.

Nine of the small flour sacking scales of the dormant type were out of level. Thirty-eight were full of dust, bran and grain. In many cases it was binding on the levers.

The beam boxes on 18 scales were out of plumb and had to be reset; 4 were condemned, as they were in very bad shape.

Out of the total number of scales only 10 were found that were or had been painted each year.

There were 98 of the 161 scales adjusted that were weighing fast (by that I mean they were weighing heavier than they ought to), and 63 weighing slow; they were weighing lighter than they ought.

W. W. Alder of Lafayette was the next to address the dealers and entertained them with a paper entitled, "Observations of Forty Years in the Grain Business." The old dealers and the younger men were alike interested in the reminiscences of the veteran grain man and at the conclusion of his address he was heartily applauded.

Because of the late hour the balance of the program was postponed and the meeting ended in a general discussion and the disposal of miscellaneous business.

THE SMOKER.

In the evening the dealers met in the Assembly Room of the Board of Trade, where they proceeded to light cigars and listen to and enjoy the music.

Mayor Shank, of Indianapolis, welcomed the dealers and advised them to enjoy themselves. He was followed by the Hon. Samuel M. Ralston, of Lebanon, who made an address on "Business Integrity." Among other good things, Mr. Ralston, who is the Democratic party's candidate for governor of Indiana, said:

Business integrity suggests the presence of the moral element in transactions between men. My subject is therefore no more applicable to the grain dealer than it is to any other business man. Whether he deals in toothpicks or the staff of life, society demands honesty on the part of the business man. Whether he operates behind the counter in a cross roads store or on Wall street the public is affected—perhaps remotely—but affected by all the transactions of the man in business, and the people are demanding a higher ethical standard for him.

The people in their sober moments are coming now to understand that national grandeur cannot long endure with the moral element eliminated or even materially weakened in the conduct of the business of the nation.

He traced the gradual growth towards better things in the commercial world and observed that—

bad as conditions have been and are yet in the business world, they are not hopeless. A quickened public conscience is righting many wrongs and pointing the way to better things. Recently a prominent railroad official, while being examined under oath touching certain charges against his company, testified that "these things were not once thought to be improper. It seems that they are now."

Later on in complimenting the grain dealers, he said:

Those from whom you purchase constitute an indispensable part of our population. Side by side with these is the man in the mine and the man in the shop. The railroads may be dumped in the scrap heap and the banks closed through failure and the country will continue to prosper; but destroy the producing ability of those who operate the farms, mines and shops of the country and men will beg for bread and our national glory abide in memory only. Canon Farrar had the producing class in mind when he declared that "in every country the nation is in the cottage, and if the light of your legislation does not shine in there, your statesmanship is a failure and your system is a mistake."

Mr. Ralston maintained that there is more honesty than dishonesty in this world and that things upon a whole are sweeping on to the good. He closed by saying: "Unless he who produces can sell at a profit he who buys can not long continue his traffic. I know of no greater contribution the Indiana grain dealers can make towards the permanent prosperity of the nation than to stand for business integrity in the intercourse of men."

Mr. Ralston was followed by Hon. Chas. A. Bookwalter, former mayor of Indianapolis, who entered a plea for "Commercial Tranquillity."

THE SATURDAY SESSION.

The Saturday session was called to order at 9:30, when the chair introduced President Goodrich of the National Hay Association, who invited this Association to attend a meeting of the Hay Association to be held in Kansas City on July 16 to 19.

Sec'y Riley made a motion that the chair appoint a committee of not less than three delegates to attend this meeting; and the motion having been carried, the President appointed the following gentlemen: A. F. Files A. E. Reynolds and Chas. B. Riley.

IMPROVING GRAIN TRADE CONDITIONS.

A paper was read by Bert A. Boyd of Indianapolis on, "Trying to Improve Grain Trade Conditions: 'Everybody's Doing It' (or Should Be)." The paper was substantially as follows:

In my judgment the Indianapolis market is in better condition today than for several years, but we appreciate that it is not perfect; and the trade here in general is working earnestly to make still further improvements. We realize that we are at times handicapped on account of limited elevator facilities, and frequently meetings of our entire grain trade have been held working to a betterment along that line. At these meetings everything in reference to complaints against our market has been freely discussed, and much more is now being done to merit the confidence of the trade, attract business this way and keep shippers satisfied. At times shippers send grain here which we in turn forward to other terminal markets on through billing without unloading here, and when destination weights show a shortage or returns are held up in such markets or delays occur on the railroads, the Indianapolis market gets the blame for it. With increased elevator facilities here, much of this trouble could be avoided by making settlements on Indianapolis unloading weights as final. Formerly we were subjected to severe criticism, and not infrequently justly so, on account of delayed returns, but through the combined efforts of our receivers we have been able to furnish prompt returns and have had but little complaint in handling the last corn crop. We have occasionally received complaints against our inspection department, but where is there a grain market of any importance that has not this same experience? Our grain committee is doing everything within its power to bring the inspection department up to the highest possible plane of efficiency, but our inspectors, like those in other markets, are human and may make mistakes; but their integrity can not justly be questioned.

It has been charged that in public markets receivers may have the grade changed to suit their convenience. That does not and can not obtain in this market and we are loath to believe it does in any other reputable market of this country. Along this line permit me to call your attention to the following amendment to our Board of Trade rules adopted Aug. 15, 1911:

"The Chief Inspector shall not change a grade of grain after the sample has been delivered except on the recommendation of three disinterested members of the grain committee. Any changes made shall be reported to the Secretary at once."

While it is necessary that you have the recommendation of three disinterested members of the grain committee before the grade can be changed, our inspector is not even then compelled to change the grade if in his judgment it has been correctly stated; however, in such cases the interested parties may appeal to the grain inspection appeals committee, whose decision is final.

Some shippers also complain of alleged excessive discounts. If dissatisfied shippers to this market request that sample be referred to our discount committee for adjustment (no interested parties being permitted to serve at any time), their request is complied with and the decision of that committee as to discount is final.

[Mr. Boyd then referred to the new jurisdiction assumed by the Board over grain weights in that market; the new form of weight certificate issued, accepted as evidence by the railroads in case of claim for loss, a form recommended for universal use by the trade; the careful inspection of grain scales in use in the market, etc., concluding this portion of the address by saying:]

If at any time our Board of Trade weights are not satisfactory to shippers, it is the desire of our grain committee that you file your complaint, returning weight certificate direct to the Secretary of the Indianapolis Board of Trade, who will place it before the committee; and I assure you that in every instance a thorough investigation will be made. If for any reason you prefer to send it to the secretary of this Association, I have no doubt he will be pleased to present it for you. A general complaint of shortages in any market will hardly have the effect to correct it, but specific complaints lodged with the committee having jurisdiction over the official weighers will enable it to investigate the specific cases and find if complaints are more numerous against one weigher than another, thus materially assisting them in locating trouble.

At present we are making an effort to perfect arrangements for the publication of an official daily price current, believing that market conditions reported in this manner will be more satisfactory to our trade than as reported at present.

I have told you what Indianapolis is doing to improve grain trade conditions and perhaps you can tell us how we may further improve along this line; if so, we will be glad to have your views, for what we desire and need is co-operation on the part of country shippers.

[Mr. Boyd then cited a few recent experiences of his own with grain consignments handled by him in order to give shippers a better appreciation of what he meant in asking the shippers to aid in bringing about improved grain trade conditions. On the basis of this actual experience of a working receiver Mr. Boyd offered the following suggestions, which, if carefully observed, will, he believes, aid considerably in bringing about improved grain trade conditions:]

1. Furnish a complete uniform weight certificate on each car as soon as loaded and mail it to consignee with instruction whether grain is on consignment or on contract.
2. Show actual loading weight on each bill of lading.
3. Show the name and number of seals.
4. Have all bills of lading show routing and rates and signed by the railroad agent in ink or indelible pencil.
5. See that all bills of lading are properly indorsed.
6. Instruct your banker to send all your drafts to Indianapolis direct.
7. Clean all your grain carefully before shipping, as time and money are well spent in so doing.
8. If your shipment contains a different quality of grain from that indicated on the surface, it will be much to the shipper's advantage to so advise consignee of that fact. This matter apparently is frequently overlooked, generally resulting in a loss to the shipper. For instance, if a shipper loads a car partly with either mixed or yellow corn, completing it with white corn, and the inspector is unable to probe deep enough in the car to find the colored corn, and the car is sold to a white corn miller who is in position to use nothing but pure white corn, on unloading, when the colored corn is discovered the car is rejected. This results in additional switching charges, the rebilling privilege is made void and in numerous ways additional expense is caused, which of course must all be borne by the shipper, while had he advised the consignee of the actual contents loaded the shipment might have been sold at a small fraction less and accepted without any objections on the part of the buyer.

9. When consigning, I would suggest that you first select a commission man in whom you have confidence that your interests will be properly protected. I might be permitted to digress here enough to say that this suggestion might with propriety be made with reference to sales made direct or through brokers, since the elements of confidence and integrity are of the utmost importance in all lines of business and absolutely necessary in the grain business, if proper results are to be obtained. The conservative and successful banker has long since discarded the theory of increased dividends from excessive rates of interest, the integrity of the borrower being regarded a necessity equal to if not superior to the question of collateral. The grain man can no doubt augment his dividends as well as increase his comfort and the pleasure in doing business by the adoption of the banker's practice; hence the highest bidder is not necessarily the one to whom the sales should be made, either direct or through the commission man or broker.

There were further papers by C. S. Clark on "Leaking in Transit"; by W. C. Calkins, superintendent of the Cincinnati Chamber of Commerce, on "The Value of the Commercial Exchange to the Grain Dealer"; by Henry G. Bell, agronomist of the Middle West Soil Improvement Committee of Chicago, on "Fertility—Yield—Quality"; and by B. T. Galloway, chief of the Bureau of Plant Industry of the Agricultural Department, read by Frank A. Witt in the absence of Mr. Galloway, on "Grain Investigations of the Bureau of Plant Industry, U. S. Department of Agriculture."

GRAIN STANDARDIZATION.

Mr. Galloway's paper was a broad and generalizing review of the work of the Bureau, which includes: (1) improvement in grain production, dealing largely with farm practice and farm management; (2) studies of grain diseases with a view to the discovery of remedial measures, the losses by plant diseases in this country being estimated at 45 to 50 million dollars annually; (3) improvement of grains through breedings and selection; (4) extension of the grains area into new sections; (5) introduction of new and promising grains from foreign countries, coming finally to "the question (6) which will no doubt be of most interest to you as grain dealers, and that is—

THE STANDARDIZATION AND IMPROVEMENT IN MARKETING AND HANDLING OF GRAIN.

The Bureau of Plant Industry has been engaged in this work for the past ten years, the investigations, experiments and demonstrations now conducted being the direct outcome of the early studies authorized by Congress to determine the causes of deterioration of grain in transit. From the outset we have endeavored to make plain that our work was primarily investigational and intended to bring together in a scientific and practical way data that would be directly useful and helpful to the great and varied interests represented by the grain trade. From time to time the question of Federal inspection of grain has come up either directly or indirectly, but our attitude has been and will continue to be, that this is a subject that does not necessarily concern the Government at the present time and may never become a vital issue unless the grain trade makes it so by willful neglect of the safeguards which the business demands. We do not believe there is any likelihood that the safeguards will be neglected; in fact, taking the trade as a whole, it seems to be tending more and more to the adoption of the moving principles of self-protection without Government supervision. Beginning with the grain back on the farm, there is still a great deal to do in the matter of securing and maintaining quality. The farmer himself needs a lot of education along this line; but when he gets it and attempts to use it, he ought to

be protected in his efforts to get a fair share of the profits resulting from his labors.

The present grain trade in this country has been developed to its high state of efficiency through long and painstaking labor, and we do not believe it has been the intent of Congress to enact any legislation which will arbitrarily interfere with the legitimate phases of this business. For the last ten or twelve years we have presented the work of the Bureau of Plant Industry before committees in Congress and during that time various phases of grain handling, including questions connected with Federal inspection, have been discussed. I believe I am safe in saying that the gist of all this discussion has indicated a desire on the part of Congress not to interfere with the legitimate grain trade through inspection or any other way. Congress, however, has indicated a lively interest in the investigational and experimental work having for its object the obtaining of facts which will enable the grain trade in this country to so govern its work as to bring about uniformity in grades and material improvement in the handling of grain. This is especially true of grain used for export purposes. Our export grain trade is of vital consequence to us, and every precaution should be taken to maintain the high standards of the business. Unless this is done our interests will suffer, and the first to feel it will be the commercial organizations which handle grain at our respective ports.

[The paper then sketches specifically the lines of investigation carried on to determine rate of deterioration in store and transit, natural shrinkage; to note the quality and condition of export grain, and its deterioration in transit; conditions involved in grading grain in domestic commerce and the basis of intrinsic quality, including its treatment on the farm and milling and bakery tests of bread grains; and finally]

the determination of the relative feeding values of grain which has undergone various degrees of deterioration. This work so far has been confined mainly to corn. The feeding tests inaugurated by direction of Secretary Wilson have for their primary purpose the determining of the relative feeding values of various lots of corn which have undergone different degrees of deterioration, also to determine what degrees of deterioration are necessary before corn becomes unfit for feeding purposes. The Secretary has also issued instruction that a definite line of feeding experiments be undertaken with sulphured or purified oats. This work will soon be under way and it is hoped within another year definite results may be secured.

Summarizing we may say:

1. The work of the Bureau has to do with the questions of increasing grain production through improvements in cultural methods; the prevention of diseases; the securing of new and valuable types by breeding and selection; the extension of grains into new sections; the introduction of new grains from foreign countries, and the standardization of grades and improvements in marketing and handling the crop.

2. The work of the Bureau so far as relates to grades, markets, etc., is primarily investigational and educational, aiming to make its results of such a nature that the grain trade will accept them as helpful in its legitimate work.

3. The Bureau's policy has been to so conduct its work as to bring about a recognition of the need of uniformity of grades and the ultimate adoption of standards which may be established.

4. The Bureau does not recognize the need for Federal inspection of grain as long as the grading, handling and marketing are conducted in a legitimate way.

5. The principal work at this time connected with the standardization of grain has to do with the securing of data which will settle the questions as to the factors governing grades.

6. The investigations have proceeded to the point where the standards for corn may be announced within the next year.

7. The work on other grains will continue, including feeding tests to determine the food value of deteriorated and heated grains.

RESOLUTIONS.

The committee on resolutions made the following report, which was adopted without dissent:

THANKS TO OFFICIALS, ETC.

Resolved, That the thanks of the Association be extended to our officers for their energetic work during the past year and for the able administration of its affairs.

Resolved, That the Association also express its thanks to the Indianapolis Board of Trade for the use of the Assembly Hall and for other courtesies received; to the grain dealers of Indianapolis for the very excellent entertainment furnished; and to the following gentlemen who have contributed to our instruction and entertainment during the meeting: Hon. Samuel L. Shank, Mayor of Indianapolis; Hon. Samuel M. Ralston, Hon. Chas. A. Bookwalter, Messrs. W. W. Alder, Bert A. Boyd and Chas. S. Clark; W. C. Calkins, secretary of the Chamber of Commerce of Cincinnati; Henry G. Bell, agronomist of the Middle West Soil Improvement Committee; B. T. Galloway, chief of the Bureau of Plant Industry, and others.

SUPPORT PLEDGED.

Resolved, That we pledge our hearty support to the officers elect and predict for them the success they so well deserve.

PUBLIC ELEVATOR LAW.

Whereas, The operation of public elevators accepting grain for storage or transfer is not in all cases and respects satisfactory, therefore, be it

Resolved, That the secretary and legislative committee be instructed to use their best efforts to secure such legislation as will secure state control and supervision of such public elevators.

LAW OF WEIGHTS AND MEASURES.

Whereas, The last legislature enacted a law providing for the appointment of city and county sealers and the inspection of weights and measures; therefore, be it

Resolved, That we commend this law as a good and wholesome measure, but call attention to the fact that under its provisions injustice might in some cases be done, and recommend that it be amended so that owners of scales or measures be given due notice if such scales and measures are found unlawful and opportunity given for their correction before action can be taken to penalize such owner.

Resolved, That we favor the enactment of a law providing for the appointment of official weighmasters by the judges of the circuit courts with power to issue certificates of weight under the authority of the court.

PURE FOOD LAW.

Whereas, The recent ruling of the National Pure Food Board applying the pure food law to grain resulted in the confiscation of grain that was out of condition, or became so in transit; and

Whereas, The enforcement of such a construction of the law would result in preventing the shipment of millions of bushels of grain and entail a great loss to the farmers of Indiana, therefore, be it

Resolved, That we favor the amendment of the state and Federal pure food laws so that they shall not apply to grain in its natural condition; and the officers of the Indiana Grain Dealers' Association are instructed to use their best endeavors to that end.

WEIGHING FACILITIES ASKED FOR.

Whereas, Injustice is often done shippers of grain because of the fact that transportation companies do not weigh shipments at the originating point, therefore, be it

Resolved, That we favor the enactment of a law compelling railroads to provide facilities for weighing carload freight at all stations where sufficient tonnage is received to warrant the installation of such facilities.

COOPERING CARS.

Resolved, That we again call attention of the members to the great loss on account of the careless cooperage of their cars. Too much attention cannot be paid to this important detail; and if first-class equipment is not provided car liners should be used and other precautions taken against leakage.

BLOWING OF GRAIN.

Resolved, That the several boards of trade with which our members have business relations be requested to make definite rules and instructions with reference to the blowing of grain, so that such blowing must be done under the supervision or by definite instruction of the inspector.

ARBITRATION RULES.

Resolved, That the president be authorized and instructed to appoint a committee of three members to act with a committee of the Grain Dealers' National Association to revise the Arbitration Rules.

The following resolution was read by Mr. Wasmuth as one that had not been taken up by the resolutions committee:

Resolved, By the Indiana Grain Dealers' Association in convention assembled, this 15th day of June, 1912, at Indianapolis, that we recommend that every member post his prices in a prominent place about his office each business day.

On motion of Mr. Riley the resolution was adopted.

The report of the nominating committee was read by Mr. P. E. Goodrich, recommending the election of the following officers:

President, Charles A. Ashpaugh of Frankfort.

Vice-president, H. H. Deam of Bluffton.

Directors, A. B. Cohee of Frankfort and J. S. Hazelrig of Cambridge City.

By unanimous vote the report was approved and the gentlemen who were recommended were elected to the respective positions as named.

The business of the session concluded, the remaining time available was devoted to brief addresses of the nature of "good of the order." Called on by Secretary Riley, President Ashpaugh said:

I want to repeat a remark that Mr. Wasmuth made this afternoon. It was that every new president came in with a great deal of enthusiasm and vim and with the determination of making the Association grow and get a great many new members; but before the year was over he found he could not do this alone.

We have not much raw material in our state left on which to draw for new members, especially in the central part of the state. Mr. Riley sent me one of his letters, and I looked over very carefully the grain dealers in our territory. In our locals we have worked this out. We had five or seven that were not members and we got them in; so we have exhausted our territory.

I do hope that this year will prove the most prosperous year that we have had for a number of years. Even if we do lose a number of members from the increase of dues, we will pick up again and be on a more solid basis. Some one brought it out here today that anything that was of benefit to any one grain dealer is a benefit to all; and if we could get the men who do not attend these meetings to realize this, we would have no trouble in getting them to join us, and we would have less dropping off because of raising of the dues. I would be glad if every member of the Association would consider himself a committee on membership to secure additional members.

We have with us a number of members from different points outside the state, and would now be glad to hear from them.

Mr. L. W. Forbell of New York responded and said:

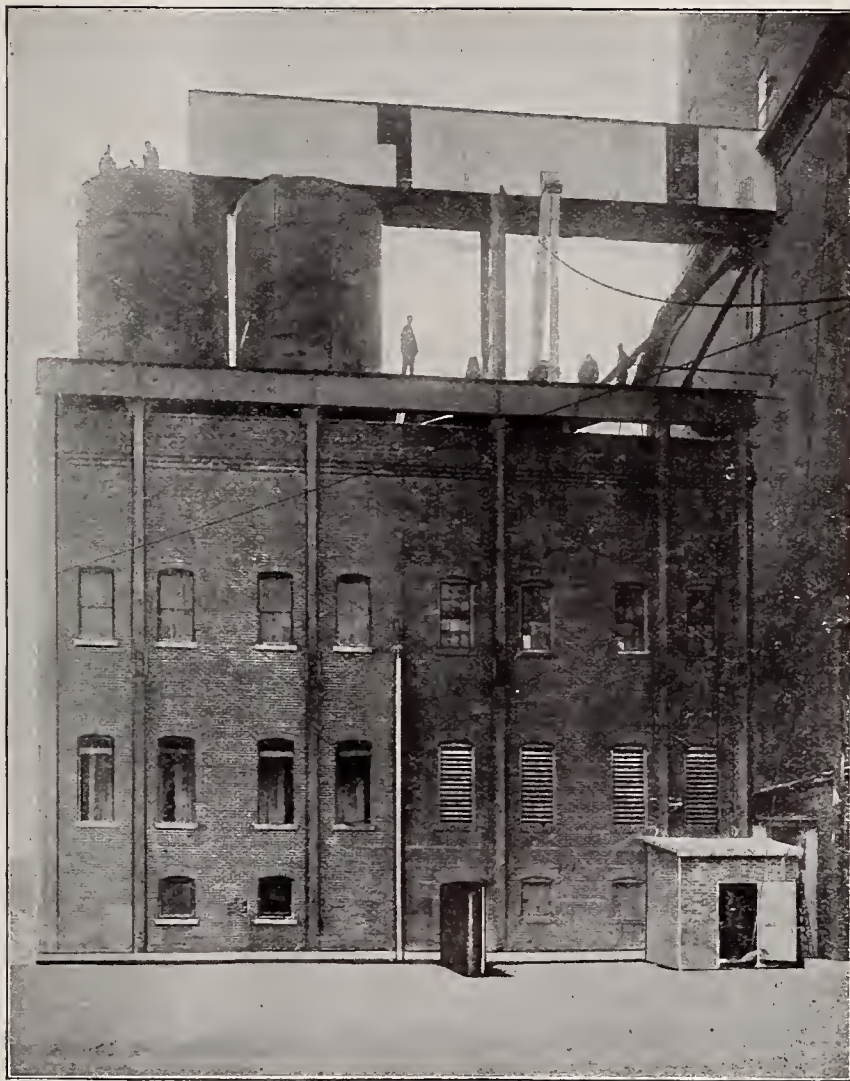
I met Mr. Bert Ball, who asked me to talk to this Association on crop improvement. He wanted to come down here himself, but on account of the meeting at Cedar Point on Monday was unable to do so, and asked me to say something to the members of the Indiana Association regarding the new proposition that has been made to the counties. I refer to that of the Sears-Roebuck Company, which has offered \$1,000 each for county work, to the extent of \$1,000,000. This \$1,000 unit is to go to any county where the county itself will bear the expense of an agronomist, or grain expert, who will go into that county and teach the farmers what he knows about good seed, its distribution, the kind of grain to use, etc. That offer is now being taken advantage of in a great many directions. Mr. Ball showed me two checks on last Friday for \$1,000 each. They were the first checks. That shows the genuineness of this offer. The Crop Improvement Committee is receiving many applications; much correspondence as to how to proceed with this matter. There is no reason why Indiana cannot put a man in every county in the whole state. It is a necessity, and the means have been provided to carry on the work of crop im-

NEW HESS GRAIN DRIER AND COOLER AT LOUISVILLE, KY.

Our illustration shows the new Hess Drier and Cooler at the Kentucky Public Elevator at Louisville, Ky. This is said to be the largest single equipment for drying grain that has thus far been erected anywhere. It consists of four units, each one capable of handling separately 15,000 bushels of grain per day. When in full operation 280,000 cubic feet of air per minute is blown through the drying and cooling racks, propelled by eight 90-inch steel plate fans, requiring in all about 80 H. P.

Heat for the drying chambers is supplied by eight banks of steam coils containing approximately seven miles of one-inch steam pipe. When in full operation the driers contain about 7,500 bushels of grain. One man, by the use of convenient levers and attachments, is able to control every part of the drying and cooling operations at will.

The construction throughout is of heavy galvanized steel, and cast iron, no combustible ma-



NEW HESS GRAIN DRIER AND COOLER, LOUISVILLE, KY.

provement and good seed. We have got to have it. Your wheat crop is a failure, probably due to the hard winter; but last year Illinois, Indiana and Iowa had a poor crop of wheat. Perhaps this is on account of poor seed. The farmers have got to learn how to plant that seed and take care of it after it is planted. You have got to have crops and the farmer has got to be shown. We have got to raise more and better crops in the United States or we will become an importing country. This year New York state imported corn. We should have that business.

J. J. Rammacher of the Eastern Grain Co. of Buffalo, J. M. Adams of Rosenbaum Bros. of Chicago, A. F. Files of Evansville, D. L. Brookie of Monon, and others commended the work of the Association.

The meeting was then adjourned *sine die*.

Coast firms of grain buyers who hitherto have not figured prominently in grain buying in Lewiston and the Asotin County, Idaho, wheat fields are opening offices in Lewiston and expect to bid for the bumper crop.

In 1911 England's largest import of wheat was from India; its second largest, from Russia; third largest, from Argentine; fourth, from Canada; fifth, from Australia; sixth from the United States. In 1897 the United States sent twice as much wheat to England as any other country and eight times as much as any except Russia.

terial of any kind being used about the driers or the buildings containing them.

The first installation of Hess Driers at this plant was made in 1908, two units, or half of the present equipment being built in that year.

So efficient and profitable did it prove that a duplicate equipment was ordered last December, and was added to the first installation early in the spring.

Covering a period of more than a month past, we have made it a point to test out the competency of the telegraphic service to and from various stations in Iowa and to some extent also to and from points in Illinois. The service from most of such points in Iowa was exceptionally prompt; less satisfactory from Illinois stations, but taken as a whole probably more efficient than the trade has assumed. We suggest a more general use of the telegraphic lines, believing that it is the present aim of the telegraphic companies to constantly improve the service and, where it is slow, unsatisfactory and insufficient, to correct irregularities and to insure such a prompt and satisfactory service as to promote the general trade between country points and the principal markets, especially during the business season.—Pope & Eckardt Co., June 12.

OHIO GRAIN DEALERS.

ANNUAL MEETING AT CEDAR POINT IN JUNE—OFFICERS ELECTED AND OTHER GENERAL BUSINESS.

The officers elected at the thirty-third annual meeting, held at Cedar Point on June 19 and 20, to serve the Ohio Grain Dealers' Association during the ensuing year are as follows:

President, E. C. Eikenberry of Camden.

Vice-President, Earl C. Bear, Hicksville.

Secretary-Treasurer, J. W. McCord, Columbus.

Governing Board—H. S. Heffner, Circleville; H. S. Grimes, Portsmouth, J. L. Doering, Antwerp.

The first business session of the thirty-third annual gathering was called to order in the Ercakers Hotel on June 19 by President E. C. Eikenberry of Camden, and the members listened to a cordial welcome from Jas. A. Ryan of the Cedar Point Resort Co.

H. S. Grimes of Portsmouth in responding to the address of welcome said the Association was the oldest organization in the grain trade. The annual meeting is held at Cedar Point because it is a pleasant place, he said, and also because of the hearty welcome that Mr. Ryan always gives to the visiting grain dealers.

John L. Bladon of the Norfolk & Western Railroad spoke about the facilities and service offered by that line, for transporting delegates to the annual meeting of the Grain Dealers' National Association to be held in Norfolk October 1, 2, 3. The Norfolk & Western has been selected as the official route for this meeting.

PRESIDENT'S ADDRESS.

President Eikenberry read his annual address as follows:

The past year has been characterized by abnormal conditions, affecting all lines of trade. A summer of extreme temperatures followed by a winter of equal extremes furnished eccentric crop conditions, rendering all products of the soil uncertain as to yield and quality; at the same time there was increased consumption, driving food for both man and beast to the prices highest in a period of thirty years. These facts, attended by much social and political unrest and attendant impaired confidence and business depression, have brought about a curtailment of business activity and the adoption of a hand-to-mouth policy by business interests both large and small. To a greater extent probably than most other lines of business has the grain trade been subject to these unusual and, in a measure, malevolent conditions. Practically every individual in the grain trade and its allied interests has changed his methods of doing business to meet the changed conditions of the past year; in many instances business self preservation has rendered radical changes necessary. We are assembled here in thirty-third annual convention of the Ohio Grain Dealers' Association not only to renew and recement old friendships, not only to learn by association to know each other better and to respect each other more, not only to strive for a vision of higher ideals in our business and a better appreciation of the importance of the grain trade in the business life of the nation; but at the same time to exchange the experiences of a remarkable year and to discuss many problems which today owe their prominence to the peculiar conditions of the past twelve months.

There is a tendency to change in the essentials of the conduct of all lines of business. Social unrest and commercial dissatisfaction rush to remedies in legislation and readily find cheap advocates to propose and to support measures for the change of the old order of things, wherever cause for untoward conditions may be imagined to exist. Destructive rather than constructive statesmanship prevails. The pinch of the high cost of living seeks relief in legislation on cold storage, regulation of transportation charges, on trading in grain futures, in investigation by committees, both scientific and unscientific, beginning with a surmise and ending without a conclusion, all looking for artificial conditions and overlooking or ignoring the natural conditions which are responsible for the evils they seek to alleviate.

Every trade, every interest is affected; redoubled vigilance and increased effort is required to ward off dangerous misrepresentation or destructive legislation. Nature fills a corn crop with water, locks it there in ice storage, releases it in transit to Southern consumers, much to the discomfort of the shippers and to the positive disgust of the receivers. An unsatisfactory condition is perceived to exist, and in an effort to alleviate a purely natural condition the interests of the entire grain trade are imperiled by threatened application of the provisions of the pure food and drugs act to grains in their natural state; and at the same time a distinct impetus given to legislation menacing the grain trade with Federal inspection. This instance is typical. The legislative committee of the Grain Dealers' National Association can give abundant witness to the fact that the grain interests of the country are menaced with their full share of inimical and ill-advised legislation. The labors of this committee, since the first Monday in last December, have been particularly arduous. Its efficient service alone should entitle the National Association to the hearty support and

co operation of not only this Association but also of every other association of grain producers or grain handlers. As a trade organization it is rapidly becoming conspicuous for its efficiency and its ability to care for the interests of its members and is being served by men as high class in mental and business acumen as those found in any other similar organization.

As the national organization concerns itself chiefly with matters affecting the grain trade as a whole, relying on the affiliated state organizations for support and co-operation, so the state organizations in turn concern themselves with matters only of state-wide importance and of a right demand and receive the support and co-operation of such local organizations as may exist within the several states, leaving to such local organizations matters of purely local interest or policy. Clearly in the province of the state organization is the prevention of adverse state legislation and the shaping of such legislative enactments as may be for the betterment or the protection of the business of its members. This has been an off-year for the Ohio legislature and consequently an off-year for the legislative committee of the Ohio Grain Dealers' Association. This respite is appreciated by our committee and especially by our vigilant Secretary McCord, after the arduous session of 1911.

True to its policy, the Association has continued actively to co-operate with the College of Agriculture of the Ohio State University, the Ohio State Experiment Station, the efficient secretary of the State Board of Agriculture and the superintendent of agricultural extension work in the public schools of Ohio in all efforts to improve agricultural conditions in the state. The crop improvement movement goes forward with our members in all parts of the state in the lead and actively interested. The natural conservatism of many farming communities, together with their lack of initiative, is discouraging; but by education and demonstration this is being overcome and the cause is advancing. The

1911 crop of corn was a nightmare, rich in sleepless nights and unhappy experience. However, the better judgment with which this crop was bought, handled and marketed, together with continually advancing markets, enabled most dealers to realize a profit on the crop. Abnormal weather and seed conditions are responsible for the present irregular outlook for corn in 1912.

Crop reports, while improving in comprehensiveness and reliability, still leave much to be desired; and I recommend that this Association use its influence wherever and whenever possible to secure an increased appropriation for the use of the Crop Reporting Bureau of the Federal Department of Agriculture.

No argument need be deduced to convince every grain dealer of the vital importance of scales that are correct and remain correct under all conditions. I respectfully suggest such action on the part of this Association as will secure for its members adequate and efficient scale testing and repair service, either by advantage of statute already enacted in this state, or by the establishment of such service under the control of this Association and on plans similar to those in operation under the control of associations of grain dealers in other states.

The grain trade journals are thoroughly alive to all the interests of the trade, are ably edited and deserve the substantial support of every grain dealer. A subscription to any or all of them is one of the best investments of a like magnitude on the part of any live grain dealer.

The Ohio Grain Dealers' Association should find its highest usefulness in removing prejudice and promoting good fellowship and a spirit of arbitration of differences among its members, together with the inculcation of high standards of business honesty and integrity. Sensible men do not compete and litigate; they co-operate and arbitrate. The cut-throat, street-buying competitor is fast disappearing from the trade. He has eliminated himself; the fittest have survived. Half the business



OFFICERS OF OHIO GRAIN DEALERS' ASSOCIATION.

Seated—Pres. Eikenberry, Sec'y McCord. Standing—Directors H. S. Grimes, H. W. Fish and A. E. Grubbs.

movement is almost nation wide, the various crop improvement agencies are drawing more closely together and henceforth will move with less waste of energy along definite lines of endeavor toward the goal of the conservation and development of the agricultural resources of the country. This movement is heavy with great economic possibilities and is receiving the active co-operation and financial aid of many of the best and biggest business interests. Our interests are vital. We must aid and this convention should show a lively interest in what is being done and what is to be done, as there come before it the actual missionaries from the fields.

The state of Ohio has its full equipment of elevators and flouring mills. More are continually being added. Agricultural resources must be increased to keep pace or there must occur a shrinkage in values of grain handling facilities. It costs more to do business than in days gone by. Wider margins are difficult to secure. Co-operative elevators in many sections are seeking to save to the producer at least a portion of the margin heretofore exacted by the country elevator operator. Their success or failure is a question of the future. Good can and will come from the movement. The experience of the few who put them selves in the place of the elevator owner and operator will enlighten the many. Central market requirements will be better appreciated. The necessity of grading the grain as it is received from the farmer will be recognized. The farmer will learn the fact that the elevator operator who does not grade his grain at the elevator door can be neither honest nor just to all parties concerned, himself included. This is the age of co-operation. Co-operation for co-operation will succeed; co-operation for competition will fail. The honest co-operative competitor wants to live and will let live; the dishonest one will eliminate himself.

Crop conditions in Ohio are far from satisfactory. The wheat prospects are the lowest in many years; the state may not and probably will not produce in excess of 10,000,000 bushels. The states immediately west offer no source from which our milling interests can draw their supplies. The grain handlers of the state should wisely co-operate with the milling interests of Ohio to the end that economic waste may be reduced and our millers may be enabled to draw their supplies from producing sections as near their mills as is possible. Distributors from central markets will, of course, only in a greater degree, continue to find their interests and those of their miller customers to be identical. The

on a fair margin is better than all the business on no margin. Our competitor is not nearly so mean as we once considered him. We meet him half way and learn to look at things from his point of view. Most business disputes would never have originated, or once started could be amicably adjusted, could the parties thereto put themselves each in the place of the other. If we avoid waste, clean up, paint up, look cheerful, maintain cordial relations with our competitors, seek the good in our fellow men, be honest, enforce honesty in others, let the speculator "fly the kite," know all about our own business and not too much about the other fellow's, prosperity is bound to come. All the King's horses and all the King's men cannot pull our business down. Above everything else our late president [Miller] stood for the highest ideals in trade relations and business integrity. His quiet, forceful personality imbued with the spirit of Him who taught not only the "fatherhood of God but also the brotherhood of man," was in itself a potent force in compelling right relations and smoothing out difficulties among warring tradesmen. By another who knew him better shall his eulogy be pronounced; but if the lofty ideals and sound principles by him advocated and practiced are enshrined in the hearts of the members of the Ohio Grain Dealers' Association, there is erected to the memory of Melville W. Miller a monument more enduring than granite.

Unexpectedly called to assume the presidency of this Association, I have labored under some advantages. I appreciate the helpfulness and friendliness of the individual members of the Association; but especially am I indebted to Secretary McCord, not only for his forbearance with my inexperience, but for his guidance and assistance in the discharge of the duties of this office for the past five months.

No Association is richer in the loyalty of its friends than is that of the Ohio grain dealers. Its gratitude is certainly due the "Old Guard," the staunch, steady, standby friends, many of whom have known the organization from its foundation. It is our duty not to take their places but to create places for ourselves. Every grain dealer in the state with investment enough to merit the title should belong to the Ohio Association. Can we not increase our membership? Cannot each member bring in a new member? This looks easy. Let's try. Let the slogan for next year be, "A stronger association, with more members, a wider influence and still higher ideals."

J. W. McCord gave the report of the treasurer for the year ending June 17. Balance on hand at the year ending June 18, 1911, \$35.74; total receipts for the year \$1,195.75; total disbursements, \$1,160.37; leaving cash on hand \$71.12.

In his Secretary's report Mr. McCord stated that two arbitration cases had been settled to the satisfaction of both parties during the year and that the membership showed a slight increase. The finances of the Association were in a satisfactory condition.

IN MEMORIAM.

A tribute to the memory of the Association's late president, Melville W. Miller, of Piqua, Ohio, was given by E. W. Grubbs as follows:

I am asked to pay a little tribute to our late president, M. W. Miller, of worthy memory, who died January 22, 1912, after an illness of short duration. I am glad to perform this little service. For one, I held him in high esteem and friendship; and while your committee might have given this paper to some one better qualified in oratory, etc., yet I appreciate the distinction, owing to the friendship that existed between Mr. Miller and myself.

The trade has had the data regarding Mr. Miller's birth, early life, business connections, etc., through the trade journals, published at the time of the funeral, and I presume the majority of you have read some account of it, so I will not go into detail in that regard; but I wish to pay a tribute of respect to the many beautiful traits of character which he possessed; and those who knew him intimately could consider themselves fortunate in having shared his friendship, and lived better for hav-

ing received the influence of his high principles of life.

death of, and paid a tribute to the memory of M. W. Miller of Piqua, Capt. E. E. Nutt of Sidney, Adam Bright of Christiansburg, W. A. Nutt of Urbana, Roger Heath of Shelby and Ira S. Comstalk of Clyde.

Hon. O. T. Corson of Columbus, made an address on the subject "Business Standards." If it is important to have standards in the physical world it is likewise important that there should be standards in the moral world. "The 'Golden Rule,'" said Mr. Corson, "should be the universal standard for the conduct and relations of men towards one another."

"On the completion of Mr. Corson's remarks, Mr. Grimes said he believed that all had been greatly benefited by the things he had said, and moved that the thanks of the Association be extended to Mr. Corson for his excellent address. The motion prevailed.

"The Work of the Crop Improvement Committee of Council of American Grain Exchanges" was the topic for an address by Bert Ball, of Chicago, Secretary of this committee. In Mr. Ball's absence a few remarks were made on this topic by Geo. B. Aylesworth of Kansas City, member of the committee. The work of the committee is given with our report of the meeting of the Council of Grain Exchanges on another page of this issue.

C. B. Smith, agriculturist in charge of the field

pared by H. E. Richter of Cincinnati, Ohio, was read in his unavoidable absence by Secretary McCord. The subject of Mr. Richter's paper was, "The Cincinnati Market; Its Requirements and Peculiar Features."

John F. Courcier, secretary of the Grain Dealers' National Association, made an address on the subject of "The Federal Inspection of Grain" in which he gave the present status of Federal inspection legislative matters and the work of the National Association in combatting inimical legislation.

John E. Bacon of Chicago read a paper on "Reforms in the Grain Trade." The fact brought out in his paper was that progress in the grain trade was continually bringing about better conditions and better things. Reforms had been brought about and would continue to be made.

H. W. Fish of Mansfield, speaking on the subject of the "Co-operation" between the Miller and the Grain Dealer," gave numerous cogent reasons why these two factors in the grain and milling business should work harmoniously together.

An address on the subject, "The Farmer and the Grain Dealer," was read by Hon. R. W. Dunlap of Kingston. The farmer and grain dealer should maintain cordial and intimate relations. He regretted to say that the expression, "the honest farmer" did not have the same significance it once had. Sound, good grain should command a higher premium than that now paid for it. One variety of seed was better on a farm than another, and some fertilizers did better on some farms than another. Everyone should co-operate in bringing about conditions when the farmer would know what is best to do under all circumstances.

Mr. Fish proposed that it should be made a violation of law for the farmer to plant impure seed.

J. W. T. Duvel stated that the Department of Agriculture has collected this spring over two thousand varieties of seed wheat. The difficulty of the seed proposition today is the seed mixtures. Seedsmen themselves should be better judges of good seed.

E. L. Southworth of Toledo said that most of the laws limited the foreign matter to 1½ per cent, although no farmer grew seed of that purity. The farmer could go out in his field and pull up all the Buckthorn, but he is too lazy to do it and would rather get \$14 a bushel for it if he can do so. There should be a proper standard and pure seed should begin with the farmer.

A. B. Beverstock of Lexington was of the opinion that it is a difficult thing for the grain man to compete with his neighbor in buying seed at the right price. If all would decide to buy seed for just what it is worth they would have no trouble.

Daniel McAllister of Columbus was introduced by Secretary McCord as the oldest living member of the Association. Mr. McAllister gave an interesting talk on some of the early happenings in the Ohio grain trade.

C. B. Riley, secretary of the Indiana Grain Dealers' Association, made a brief address, in which he stated that in Indiana there is a law relating to noxious weeds but it is not broad enough. If in Ohio they could get a law covering buckthorn and would enforce it they would get absolutely pure seed. It is to the farmers' interest to grow good seed but if he will not do so then there should be legislation on the subject.

O. H. Benson, in charge of the club work in connection with the U. S. Department of Agriculture, told of the work being done to interest the boys and girls in farm life. A greater co-operative spirit between the father and the boy would help keep the boy on the farm.

RESOLUTIONS.

H. S. Grimes read the report of the committee on resolutions. The report was adopted as follows:

FEDERAL INSPECTION, ETC.

Whereas, There have been introduced into Congress several bills providing for Federal inspection of grain; be it

Resolved, That the Ohio Grain Dealers' Association, in annual convention assembled, at Cedar Point, Ohio, June 20, 1912, hereby endorses the action of the legislative committee of the Grain Dealers' National Association, wherein Congress was petitioned to appoint a commission to investigate



ALL GOOD FELLOWS—FROM BUFFALO.

ing received the influence of his high principles of life.

As a business associate Mr. Miller was kind, cheerful, honorable and square; and in talking with his partners, I learn that he was regarded with affection by all the farmers with whom he did business; almost daily some of them speak of his kindness to them. He was a loyal association man, intensely interested in the welfare of this Association, ever ready to do his share toward making the organization a success. For many years he served the local association in his locality; and a great deal of credit should be given Mr. Miller for his efforts to promote the welfare of its members. He was especially interested in the social success of our convention meetings; and had he lived to be with us today, I am sure his greatest pleasure would have been to welcome the family of every grain man attending the convention.

As a citizen of Piqua, O., Mr. Miller was regarded highly for his correct judgment and wise advice on matters pertaining to city government, and his ideas and suggestions were given careful consideration. He was a member of the City Council, served on the official board of the M. E. Church, and was also an enthusiastic Mason, serving his lodge as Master and his chapter as High Priest, holding the latter office at the time of his death.

In family life, Mr. Miller was a splendid and edifying example of what a son, brother, husband and father should be; and the sympathy and condolence shown the relatives at the time of his death confirms the knowledge that their loss is very great.

I have seldom seen a man of more even temperament and cheerful disposition, with the beautiful optimistic habit of looking for the bright side of things; and I personally know how he strove to bring sunshine and happiness into the lives of those near and dear to him.

Having done business with Mr. Miller for many years and likewise having enjoyed his friendship, I feel keenly my loss, and realize that what I have said is but a very inefficient memento to our late president, friend, and fellow worker. Words do not come to me to express the esteem and respect due him who served us so well. May the memory of Melville W. Miller live long, and shine brightly in the heart of each member of this Association.

"Our Departed Members" was the subject of an address by H. W. Robinson of Green Springs. Mr. Robinson spoke of the loss to the Association in the

work and demonstration of the Department of Agriculture, in a brief address told of the accumulation of much scientific data and the plans for getting this information to the farmer. Present plans are for the division of the state into districts with a man in each district who shall get in direct touch with the farmer and learn just what his particular needs are. He desired the co-operation of the members of the Ohio Association to help wherever possible to get this information to the farmer. They should work together in order to get the best results.

T. P. Riddle of Lima spoke on the topic "Some Field Work on Crop Improvement Lines." Mr. Riddle related very interestingly the formation of the Northwestern County Society in eleven counties. It was brought to their attention that the plans of Mr. Ball had not been grasped by the farmer, so they tried to help along this work. They had had to contend at first with indifference and suspicion from the farmers. With the assistance of the state experiment station they had organized boy's corn testing contests, and they now felt they are accomplishing results.

Some good things were said along these lines of better farming by Prof. Goddard. John Beggs with the State Department of Agriculture, W. M. Richardson of Philadelphia, Prof. A. B. Graham and Dr. J. W. T. Duvel. Dr. Duvel spoke of the importance of paying a premium to the farmer who raised good grain. This would be the greatest incentive to be met with for improved farming.

The session then adjourned until the day following.

THURSDAY MORNING.

President Eikenberry called the Thursday morning session to order at 10 a. m. and an address pre-

the grain trade in respect to the first handling of grain from the farmer, its transportation, the handling at terminal markets, the export of grain and kindred matters, it being firmly believed that such investigation would vindicate the grain trade and set at rest the agitation for government control of the inspection of grain.

BLOWING OF GRAIN.

Resolved, By the Ohio grain dealers, that while they do not condemn the blowing of grain to grade that is customary in several of the terminal markets, they object to the blowing of same without notification to the shipper.

Resolved, That in the future we ask the receivers of grain that is required to be blown to grade to notify the shipper and get his consent; and that a copy of this resolution be forwarded to the receiving market where this habit is in vogue.

WEIGHING GRAIN BY RAILROADS.

Resolved, By the Ohio Grain Dealers' Association that it is their wish that, where it is possible, the railroads weigh cars of grain at the receiving points and also at the destination upon the arrival of grain. The object of this resolution is to prevent if possible the unreliable information received as to losses and delay in the transportation of grain.

Resolved, That a copy of this resolution be forwarded to the grain-handling roads of the country by the Secretary of the Association, with a letter urging them to adopt it where they possibly can.

UNIFORM CERTIFICATES OF WEIGHTS.

Whereas, at the present time there are a great many different forms of certificates of weights on grain, and it is believed that a uniform certificate would be one that would be accepted especially by the local consuming trade, and would add largely to the benefit of local shippers; therefore, be it

Resolved, That the Secretary of this Association formulate a uniform certificate, submit same to the members of the Association, and, so far as he can, get them to adopt it. One very vital point in these certificates will be the signature of the railroad agent where the grain is loaded to the condition of the car, which shall be embodied in the certificate, as part thereof, and signed by the agent at the receiving point. It can readily be seen the advantages of this particular point. We recommend consideration of the members of this Association to use these certificates, as it will greatly benefit and expedite the collection of claims.

ON POSTING PRICES.

Resolved, By the Ohio Grain Dealers' Association, in convention assembled, this 20th day of June, 1912, at Cedar Point, that we recommend that every member post his prices in a prominent place about the office each business day and stick to the posted price, regardless of what others may bid.

RESOLUTIONS OF THANKS.

Resolved, That the Association tender its thanks to the gentlemen who so kindly added to the success of the meeting by giving their time in addressing. It is especially desired to thank Prof. O. T. Corson for his able address. There is no question that all who heard him, by taking his advice, certainly will be greatly benefited.

Be it resolved that the thanks of this Association be extended to President Eikenberry and Secretary McCord and all other officers of the Association for the excellent work that they have accomplished in the past year. Very few members of this Association realize the amount of labor expended by these gentlemen during the year; it is almost a daily occurrence that something of importance comes up that requires their attention, and it is given freely in all cases for the benefit of all of you. Frequently if it were not for their efforts in taking up matters of importance of legislation, the grain trade of this country would suffer. Numerous cases could be cited within the past year where by their watchfulness, the members of this Association, as well as the entire grain trade of the country, have been relieved of legislation that would cause them untold disaster. It is therefore further

Resolved, That this Association go on record in endorsing the action of the National Association in handling the legislation dangerous to the grain trade throughout the United States in the manner they have so ably done, through their legislative committee and the officers of the Association.

Through the courtesies of Mr. J. J. Rammacher, secretary and treasurer, and Mr. E. E. McConnell, traveling representative of the Eastern Grain Company of Buffalo, N. Y., be it

Resolved, That the thanks of this Association are due to the gentlemen whose names are mentioned herein for the excellent manner in which they have entertained our members; and we commend their action as being progressive and certainly up to date. As a slight token of our appreciation, this resolution is promulgated.

We desire to extend to the representatives of the grain journals in attendance at this convention the thanks of the members for such attendance, as the publications given to our meetings are so widespread that it is very beneficial to the organization.

Resolved, That this Association extend thanks to the management of the Cedar Point Resort, especially Mr. Ryan, for the very courteous treatment received during our stay at this very pleasant resort; and we recommend to the Association to continue meeting at Cedar Point for the future.

NATIONAL MEETING AT NORFOLK.

Resolved, That it is the desire of the officers of this Association to urge upon the members to attend the national meeting at Norfolk. The meeting is at a time of the year when most all of our members can be relieved from business for the short time, as it is just between sessions, and your officers can assure you of one of the most pleasant

trips that has ever been mapped out by the National Association. The South at this particular time of the year is a most pleasant place to visit, and with the assurances of the committee in charge of the reception of the members who visit Norfolk, that the greatest time on record will be shown them, we are safe in saying to you that you will not be disappointed in attending the national meeting the first week in October.

IN MEMORIAM.

Your committee desires to refer to the eulogies as given by Messrs. Grubbs and Robinson on the death of the different members, and that they be made a part of the report.

H. W. Fish read the report of the committee on nominations, which was adopted. See above.

After short addresses of acceptance and thanks by the officers-elect the meeting adjourned *sine die*.

LAKE ERIE BREEZES.

The Cincinnati market was represented by H. M. Browse, and O. C. Hale.

Chicago markets were furnished hourly by Rosenbaum Brothers' wire.

From the Eastern markets there were L. W. Forbell of New York, W. M. Richardson of Philadel-



L. W. FORBELL AND W. M. RICHARDSON.

phia and Jno. W. Snyder, H. E. Elgert and F. A. Meyer of Baltimore.

By boat from Cleveland were F. C. Cain, Fred Abel, H. M. Strauss, F. W. Blazy.

J. A. A. Geidel, J. C. Moore, and F. L. Davis had the latest information from the Pittsburgh market.

R. R. Pennywitt, grain broker of Charleston, W. Va., was pleased both with the meeting and the Cedar Point Resort.

Visitors from Indiana included W. B. Foresman of LaFayette, State Secretary C. B. Riley, Indianapolis; H. E. Garrison, Converse.

There was no chance of incendiaries with C. O. Peters of the Millers National, and C. O. Garver of the Grain Dealers' National in attendance.

Congratulations from many friends were received by Mr. and Mrs. E. M. Crowe of Piqua who attended the meeting as a part of their honeymoon.

Rosenbaum Brothers of Chicago was represented by Otto Waitzmann, G. I. Woodman and W. J. Perry; Albert Dickinson Co. by W. R. McCutcheon.

Railroads were unusually well represented. There were present John L. Bladon and W. E. Hazlewood, with Norfolk & Western; L. E. Newsom, Lackawanna; C. W. Austin, C. Morrison, J. H. Hackett, The

Erie; F. W. Stoddard, New York Central; J. F. Drews, Nickel Plate.

The Ohio Association very rightly combines pleasure with business at its summer session. That "afternoon off" always insures a full attendance at the morning session.

A few of Buffalo's leading grain merchants in attendance were H. T. Burns, J. J. Rammacher, E. E. McConnell, S. O. Hall, W. E. Lee, J. G. McKillen, H. F. Keitsch.

J. L. Messmore of St. Louis and G. A. Aylesworth of Kansas City were among those who remained over from the meeting of the Council of Grain Exchanges of North America.

It was a little too cool this year for bathing, so "our special photographer on the spot" was unable to secure any art pictures of the Cleveland-Pittsburg delegates on the sands of Lake Erie.

As H. S. Grimes, member of the Governing board, said, Manager J. A. Ryan of Cedar Point Resort Co., wears "the smile that won't come off" and makes guests of the Breakers welcome in deed as well as word.

The Toledo Singing Verein is slowly but steadily improving under the coaching of H. W. Fish of Mansfield Institute. Just a little more filing off the high notes of Fred Mayer and Andy Beverstock, however, might help some.

Nearby Toledo was represented by Fred Mayer, J. W. Young, Col. E. L. Southworth, J. W. Luscombe, National Secretary J. F. Courcier, H. L. Goemann, F. J. Wilkinson, W. H. Morehouse, L. Martin, H. Fording, A. Gitteau.

Representatives of allied interests were A. S. Garman with Huntley Mfg. Co., Silver Creek, N. Y., W. P. White with Fairbanks, Morse Co., Chicago; G. H. Baxter, with Richardson Scale Co., Passaic, N. J.; A. J. Plantz with Appleton Car Mover Co., Appleton, Wis.; J. Chas. McCullough of Cincinnati Bag Co., Cincinnati, Ohio.

The register was signed by the following dealers: E. C. Bear, Hicksville; H. S. Grimes, Portsmouth; N. Morton, Columbus; J. D. Spangler, Defiance; E. T. Custerborder, Sidney; E. M. Crowe, Piqua; W. A. Dull, Willshire; J. Fritsche, Oak Harbor; A. B. Beverstock, Lexington; H. O. Barnt, Delphos; H. W. Channel, Melvin; H. Raabe, Fort Jennings; T. P. Riddle, Lima; E. O. Teegarden, Duvall; E. F. Weber, Akron; H. G. Dehring, Curtice; J. Elliott, Lima; E. C. Eikenberry, Camden; H. W. Fish, Mansfield; G. Forrester, Swanton; E. A. Grubbs, Greenville; H. A. Holdridge, Lima; W. H. Rower, Kalida; O. T. Roszell, Troy; H. W. Robinson, Green Springs; H. S. Heffner, Circleville; A. E. Krohn, Custer; J. W. Simmons, Pemberton; Harry W. Kress, Piqua; J. A. Lautz, Mansfield; J. W. Motz, Brice; W. R. Tolbert, Rockyridge; Daniel McAlister, Columbus; J. W. McCord, Columbus; R. T. Watson, Old Fort; T. B. Steinman, Minster; L. J. Seymour, Kenton; E. F. Reichelderfer, Criderville; John Marquardt, Payne; L. G. Shanely, Pemberton.

IDAHO GRAIN COMMISSION.

The Idaho Grain Commission at Lewiston re-adopted the grain standards of 1911, to remain in force for 1912 crop, or until changed by the Commission. Lewiston was designated as an inspection district and an inspector was appointed. Inspection will begin on or before September 1. Standard samples will be sold to applicants at 15c each. Rules also were adopted governing the handling of the business, for the governance of both the inspectors, the warehousemen and the public. The handling charges for warehoused grain shall not exceed 75c per ton; free storage for 90 days and 10c per week thereafter; grain may be "special piled" and individually marked and exact bags delivered out. Inspection fees are 75c per car each way, the fee to be paid by the party asking for inspection; for certifying weights, 2c per bu. for grain and 5c for hay.

No. 4 corn closed June selling at discounts of 5 to 6½c under prices current for No. 2 grades. The demand for the low grade was from the industries only.

H. W. GLADHILL.

One of the most popular machinery representatives that hail from the East is H. W. Gladhill, who since 1898 has been with the Wolf Co., manufacturer of grain handling and mill machinery, at Chambersburg, Pa. Mr. Gladhill has been engaged in the machinery business his entire life. Born in 1862 on a farm near Gettysburg, Pa., he commenced millwrighting when 17 years of age under William J. Sprenkle. He has traveled extensively in all parts of the country and has a wide acquaintance among grain elevator and mill owners in all sections.

Mr. Gladhill is one of the best informed men on lines of grain handling and milling machinery in the trade. As a designer of milling programs for the Wolf Co. he has seen built on his plans a large number of mills and grain elevators in all sections



H. W. GLADHILL.

of the country. And all of these have proved substantial, economically operating and profit making plants.

[For the "American Elevator and Grain Trade."]

ADDITIONAL FACTS ABOUT RAPE.

BY JULIAN KUNE.

In my first article on this subject I touched as fully as space would permit on the nativity of rape and its varieties, of the required soil conditions for its successful production and other facts connected with its successful production. I shall now say a few words about how to utilize the crop to the greatest advantage as well as about its oil-yielding properties.

Before entering more fully into the above enumerated subjects, I shall quote some facts relating to the cultivation of rape in Oregon from a paper published by Prof. James Whitcomb of Corvallis, who says: "Rape has been grown in Oregon for the past thirty years, seed of the dwarf Essex variety having been brought here from England in 1871 by Thomas Whitcomb. The plant flourished from the start, as the climatic and soil conditions were most suitable for its successful growth. Notwithstanding the practical demonstration of the value of the plant for twenty years in the locality into which it was then introduced, it did not attain its popularity and prominence as a forage crop until within the past five or ten years."

We quote the above merely for the purpose of convincing the reader of the reluctance which most of our farmers display to adopt new ideas on some subjects connected with successful farming. While averse to adopting useful hints, they are often ready to spend money lavishly on fake crops and questionable implement improvements. I have in my mind a rich farmer who, some forty years ago, was

one of my shippers. He once instructed me to buy for him twenty-five bushels of the "Norway oats" that then were extensively advertised as returning a phenomenal yield, the price of seed being four dollars per bushel; but the result was that not even the first cost of the seed was returned to him.

When rape is grown as a secondary, or catch, crop, it may not be possible to prepare the soil and seeding with as much care as it should be, but the result will be but slightly less favorable. Often fine rape may be grown on land that has already produced a crop of some of the early maturing crops, such as rye, oats or barley. As soon as the grain is removed, the land is plowed and at once seeded to rape, field peas and some other early maturing forage crop or winter oats that have been pastured off in spring may also be followed profitably by rape. As each year sees the extension of territory in which rape is grown, it has reached the vast Northwest where it is chiefly grown as a catch crop.

FEEDING VALUE OF RAPE.

Rape has a high feeding value and sheep and swine are fattened by it remarkably quick. It also produces, when fed to milch cows, an abundant flow of milk. Some farmers, however, do not feed it to milch cows until after they have been milked, claiming that the milk gets tainted if fed before milking, but this is still a disputed point. In Canada rape is fed to dairy cattle with remarkable success, and there is no taint to the milk following, even if fed before milking. Another very profitable way to use rape as a forage, as a part of a ration to animals that are being fattened in pens for market, or for exhibition. Nothing can surpass it, if fed to young calves while they are being weaned. As a general thing, cattle prefer rape to all other green fodders. At the Wisconsin experiment station a trial to show the value of rape as a forage resulted in a gain of 413 pounds of mutton from $9\frac{3}{4}$ tons of rape and 143 $\frac{3}{8}$ pounds of grain. It has been also ascertained at the same station that when rape alone is fed it does not give as good results as when fed in combination with grain. It has also been demonstrated that when pigs are fed on rape in combination with a grain ration one acre of rape has had a feeding value equivalent to 2,657 pounds of grain and that young pigs thrive better when pastured on rape than on clover, grain being fed at the same time in both instances. On the other hand at the Iowa experiment station it was found that, compared with clover, rape caused a shrinkage of the flow of milk. This difference in feeding value between the Canada and Wisconsin experiment stations and that of Iowa must probably be ascribed to the difference of soil and climatic conditions.

In different parts of Europe the rape plant is used as spring vegetable and tastes much like kol-rabi and the Swedish turnip.

One of the principal causes for the slow advance made in the growing of rape as a forage plant is the fear that cattle are apt to overfeed on this succulent green food and thus endanger their lives through bloat. But if we thoroughly examine this subject, we will find that there is absolutely no foundation for this apprehension, provided the feeder uses ordinary common sense.

There is absolutely no danger from bloat if the farmer gives the animals a full feed of grain before he lets them into the rape field. On a fairly full stomach they are not likely to overfeed. As we stated above, there should be a free access to a grass pasture or to feed racks of hay, or straw; for it should be remembered that the animal appetite is about the same as that of human beings; we would soon get tired of being fed wholly on "angel food" and long for a good slice of white or brown bread. So with animals; they, too, want a change in their feed, and if they have access to a grass plot or some hay they will never overeat of rape. There is little danger, too, when animals are first put into rape, for they have to acquire a taste for it. For lambs the best plan is to employ hurdles or movable fences; in this way sheep are inclosed within a limited space and are not likely to bloat through overeating. Above all, salt should be freely applied.

Besides its value as a forage plant, rape is an excellent crop to grow on fields that are infested with weeds. Its late sowing gives the weeds a good start before the final preparation of the soil begins and the preparation of the soil and its subsequent cultivation almost completely destroys the weeds; and what is left of them is prevented from growing by the rape plants which shade the ground so completely as to keep the weeds from getting a start again.

The following valuable information on the growing of rape is taken from reports to the Agricultural Department at Washington:

Prof. H. T. French from Idaho reports: "Rape lives over winter here; is unfit for forage after seed stalks developed." A. A. Abbott of Vassalboro Mine reports: "Rape, especially for sheep, can be used until snow comes, after all other green feed is gone." George W. Gowell of Orono, Maine, grows rape for poultry. Prof. William C. Brooks of Amherst, Mass., reports: "Rape is sown from early spring to midsummer for hogs. H. M. Kingsley, Kendal, Michigan, recommends rape for lambs. A. S. Trow, Glenwich, Minn., recommends rape and grain combined as hog pasture; he turns his hogs into rape when the growth is about five inches high. Prof. E. A. Burnett, Lincoln, Nebr., reports: "Use of rape increased in this state in past five years, especially for hog pasture, to which it is second only to alfalfa and sorghum." Clark Allis, Medina, N. Y., says: "Rape is sown with beans, and at last cultivation beans are pulled up by hand and the sheep are turned into the rape field." Stephen Clark of Batavia, N. Y., grows rape as fall pasture for lambs and ships them from pasture directly to market in order to avoid shrinkage. Frank D. Ward, Batavia, N. Y., says that in twelve years he has not lost one single animal from bloating; advises free access to blue grass and clover. Prof. J. F. Hickson, Wooster, Ohio, thinks rape essential for fall pasture for sheep. Prof. P. W. Card, Kingston, R. I., recommends rape for geese; while George McKerrow of Sussex, Wis., pastures chickens and pigs on rape in early summer.

RAPE AN OIL YIELDING PLANT.

There are many varieties of rape grown, and not all are oil yielding; that is, not enough to make them commercially valuable on account of the oil they contain. The fatty oil, known also as "sweet oil," is obtained from seeds of cultivated varieties of the cruciferous genus Brassica. The oil-yielding rape is cultivated exclusively for the seed containing the oil called "rape oil," or, in German, "Ruebsen oehl." Most of this "Ruebsen oehl" is pressed from the Colza rape seed (Kohlsaas). The Colza rape is extensively grown along the Danube, both in Austria and Hungary, where the oil extracted forms the greater part of the people's diet during the many days of fasting by the Wallachians or Roumanians dwelling in the eastern part of Hungary and in Transylvania. They use the oil in place of lard and butter which they are forbidden to use in the preparation of their meals during the fast, pouring it over their bread which thus soaked in oil they devour with great relish.

The Colza seed is by all means the richest in oil, and, strangely enough, the winter varieties produce more oil than the summer varieties. The production of oil from summer varieties averages from 30 to 35 per cent, while from winter seed the average is from 40 to 45 per cent. When the oil first comes from the press it is almost colorless, but after it has stood a few days it deposits a mucilaginous slime which causes it to acquire a disagreeable odor. This odor is however destroyed on the oil being refined.

The principal uses for rape oil, before the era of mineral oils, were for lubricating, lighting and for food purposes as stated above. It is still largely used in Germany instead of olive oil for salad dressing, and as such it goes under the name of "Schmalz oehl." It is largely used also for mixing with the cheaper oils, such as hemp oil and is sold as either Ruebsen Oehl, or olive oil.

Fred Kohls has taken charge of the elevator at New Germany, Minn., for the State Elevator Co.

TAKING THE COLLEGE TO THE FARM.

Secretary Wilson and Dr. Galloway have been planning for some time to inaugurate in Northern states the work on the farm that has been so successful in Southern states. "That was a gracious move on the part of the Senators," said Secretary Wilson, "when, during the consideration of the agricultural appropriation bill, they secured for the Department's farm management work an additional increase of funds.

"There is an interesting story to be told in this

people of the Department of Agriculture that the boy must be educated on the farm to a certain extent. Education in the past, as far as the farmer's boy has been concerned, has had a tendency to take him away from the farm; and away he went. Now he is being trained towards the farm and becoming interested in the occupations of his father. The boys who grew acre crops of corn have had the advice in their counties of the Department's agents; and many interesting stories are current with regard to the enterprise and pluck of these boys, who are mostly under sixteen years of age. Great yields

WHAT ONE ENGINEERING AND CONSTRUCTION COMPANY IS DOING.

The almost universal employment of reinforced concrete in grain elevator construction, as well as its prominence in other branches of engineering work, is well exemplified by the work at present being done by the John S. Metcalf Co., Limited, grain elevator engineers, of Montreal and Chicago. A general outline of this work, without going into details but well shown by the illustrations, may be of interest.



WORK IN PROGRESS ON THE ADDITION TO THE C. P. RY. ELEVATOR AT PORT McNICOLL.

connection. The cities have been filling up and the farms have been deserted. The cost of living has risen and many thinking men are grappling with the problem why it has risen. When the boll weevil came to the South something had to be done. Many Southern farmers were one-crop men; they grew cotton and upon the advent of the boll weevil many localities were being deserted. Congress gave the Department of Agriculture money with which to fight the pest.

"It was a new undertaking. Sprays, chemicals, etc., were of no use in this case. The weevil hid its eggs in the bolls where chemicals could not reach them. But something had to be done. The Department first concluded that it would be wise, among other things, to encourage the people in diversified farming. This succeeded remarkably. It would be a long story to tell all the steps taken; in fact, long-

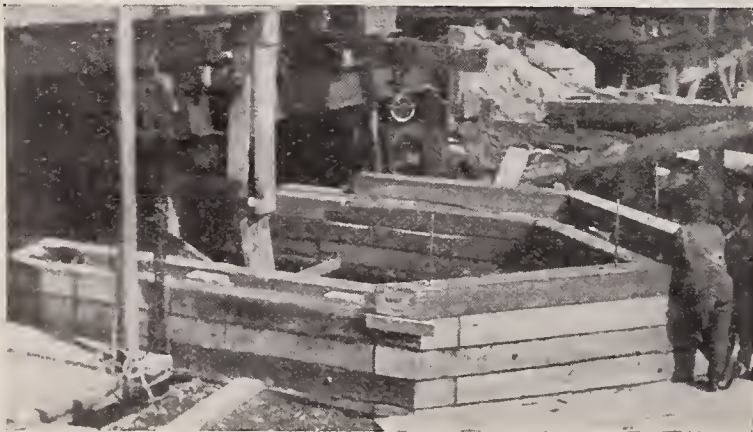
are being harvested—more than the country ever knew of before, proven, certified yields.

"These are the first steps towards better agriculture. The cattle fever tick has been a curse to the South, and the Department of Agriculture, attacking it with Federal money, has cleared the tick out of an area equal in size to three Southern states. There will be dairy products and meats coming, before long, from those localities to Northern markets.

"There is one more thing of magnitude and moment that I want to bring about; that is, to introduce into other sections of the country what has been so successfully accomplished in the Cotton States along agricultural lines. I went to the House committee and told them this. They asked me how much money I wanted. I told them that I wanted \$50,000 more this year, and would probably

A notable development is that being made for the Canadian Pacific Railway at their new Georgian Bay Terminal, Port McNicoll, Ontario. In the fall of 1910 the John S. Metcalf Co., Limited, completed a grain elevator at that point for that railroad, and during and since the construction of the elevator have been building the following also: One freight shed, 700 feet long; one flour shed, 700 feet long; one eating house to accommodate 350 freight porters; two sleeping houses to accommodate 350 freight porters; one customs house; one carpenter shop; also water tank, pump-house and complete water system for locomotive and drinking supply, and for fire purposes, and 7,000 lineal feet of wharves, in general with wood substructure and concrete superstructure.

The elevator is of 2,000,000 bushels' capacity, with reinforced concrete bins, two traveling marine



DOUBLE-WALL CAISSON FOR RICHELIEU RIVER BRIDGE PIER.



BACK COVE BRIDGE—SHOE FOR CAISSON.

er than people have time to consider in this busy age. But, in short, the college was taken to the farm. The ablest farmer in each county was selected to visit his brethren and help them towards better things. The farmer was taught to help himself. The Department has now some 800 of these farmer agents. Cotton was not neglected; and through such instrumentalities as the Department's men could think of, cotton growing was encouraged. Last year the South grew more cotton than ever before in its history. It may be said that it was a favorable year. Very good; that was fortunate; but the South grew more corn also last year than it ever grew before.

"When the college reached the farm through the best farmer in each county, every means was taken to improve the crops of all kinds. The boys were enlisted. There is an opinion prevalent among the

ask for \$100,000 increase next year. The House committee on agriculture did not hesitate a moment, but put \$50,000 in the bill. When the bill reached the floor of the House that body increased the appropriation to a total of \$251,000. Now, through the Senate, a sufficient amount has been added to make the total for farm management work in round numbers \$300,000."—Department Circular to the Press.

T. H. French has left the Lake City Farmers' Elevator Co. at Lake City, Iowa, to take a position on the road for a Milwaukee grain company.

Fred Butler, who has been the grain buyer for the Clendening Elevator at Wimbledon, N. D., for seven years, has taken a similar position with the Farmers' Elevator Co. at Walum, N. D. He has been succeeded at Wimbledon by his brother, J. H. Butler.

towers, each lifting 20,000 bushels of grain per hour from boats, and a car-loading house to load 250 cars per day. An addition to the storage capacity is now being made, to consist of reinforced concrete bins holding 2,000,000 bushels. This will make the total capacity of the elevator 4,000,000 bushels, or considerably larger than that of any elevator east of Fort William in either Canada or the United States. The plant is also designed for future extension as traffic requirements shall warrant.

The large illustration shows the foundation work under way. Gravel is screened and washed at the site of the work, the conveyors for carrying the gravel from the screening plant to the two sets of mixer bins appearing in the left center foreground. At the left may be seen the present elevator, and in the right distance the freight shed and other

buildings belonging to the new railway terminal.

"On the Mission," at West Fort William, Ontario, another storage addition to an immense plant only recently constructed is under way. The great reinforced concrete elevator of the Grand Trunk Pacific Railway, of 3,250,000 bushels' storage capacity and exceptional handling capacity, has been in operation at that point for less than two years. The John S. Metcalf Co., who were the consulting engineers for the railroad in connection with the present elevator and who laid out the grain handling portion of the entire terminal, with an ultimate storage capacity of 40,000,000 bushels, are now building 2,500,000 bushels in reinforced concrete storage bins to bring the total capacity of the elevator up to 5,750,000 bushels—a great plant, but only a part of the capacity which will be required by the time the railroad shall have been in operation over the grain prairies for a very few years.

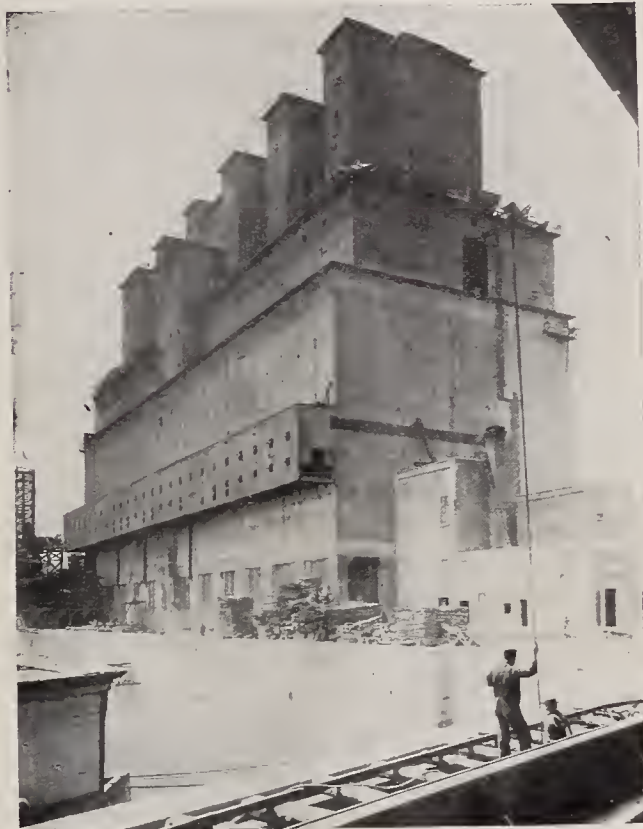
The new structure will rest on 7,500 piles, about forty-five feet long, and will contain 116 bins, 66 of them 23 feet 6 inches in diameter and 90 feet deep, with 50 interspace bins.

An illustration shows the pile driving approaching completion and concrete work on the foundations about to begin. Gravel and sand are brought in by barge and carried by belt conveyor to the three sets of mixer bins.

In Montreal an elevator of 1,750,000 bushels' capacity is just opening for business. This is the reinforced concrete plant for the Harbor Commission of Montreal, and is known as Elevator No. 2. It is undoubtedly the most complete and efficient elevator ever constructed for rapid unloading of cars and delivery to ocean vessels. The entire building, including bins and superstructure above bins, is of reinforced concrete. Not only has the use of reinforced concrete been carried further in the cupola construction than has ever before been done in grain elevator work, but the design and construction of the concrete columns, girders, floors and curtain walls would be notable when compared with reinforced concrete work in any other branch of the engineering profession. The elevator is electrically operated throughout; can unload 250 cars per day, and can, when its accessories are completed, unload 20,000 bushels per hour from each of two lake or canal vessels simultaneously and deliver grain to nineteen ocean steamer berths—to six of these simultaneously, if desired, and at the rate of 15,000 bushels to each hourly for 10 hours. A storage extension to the elevator, of 850,000 bushels' capacity, is already under way, which will make the total capacity of the elevator 2,600,000 bushels. John S. Metcalf Co., Limited, are acting as constructing engineers for the Harbor

a 500,000-bushel concrete elevator for the Rutland Railroad. The marine leg will lift 18,000 bushels per hour, and the plant will load 60 cars per day. The marine tower, bins and cupola are all of reinforced concrete.

At Champaign, Ill., the John S. Metcalf Co., Limited, has under construction a rapid transfer elevator for the Cleveland Grain Co. This plant will



MONTREAL HARBOR COMMISSIONERS' ELEVATOR NO. 2.

be equipped with 2,000-bushel scales and will be able to handle 60 to 80 cars per day. A new power plant is being built in connection with the elevator.

At Mansfield, Ohio, the John S. Metcalf Co., Limited, are building a 280,000-bushel concrete storage addition to the plant of the Goemann Grain Company, for whom the company built the original elevator and first concrete storage house. This will give the Goemann plant a total storage of approximately 600,000 bushels. The last addition consists of ten concrete tanks of 27 feet inside diameter by 65 feet high.

Outside of grain elevator work, the Metcalf Company have under construction important work for the Grand Trunk Railway at Ottawa. This includes all of the concrete work in connection with the train shed at the new Central Station, comprising foundations, roofs, smoke ducts, platforms



PILE DRIVING FOR G. T. RY. ELEVATOR AT FORT WILLIAM.

Commissioners, who are doing the work with their own forces. An illustration shows this great structure from the water side. The storage extension is under way at the left of the main building.

In Montreal, also, the above named company has under construction a 300,000-bushel storage and operating elevator for the new Dominion Flour Mills Company.

At Ogdensburg, New York, the United States branch of the company has this spring completed

and conduits; 425 feet of concrete retaining wall alongside the Rideau Canal, and some roadway and cut stone work at the entrance to the Chateau Laurier.

They are also building the substructures for renewal of two bridges for the Grand Trunk Railway, one across the Richelieu River near Lacolle Junction, Quebec, and the other across Back Cove, Portland, Maine. In both cases open caissons are being used. These are built with two timber walls

one foot apart, and the caissons are sunk by filling the interstice with concrete. The sinking is accomplished with the aid of divers. After reaching hard bottom, the caissons are partly filled with concrete deposited by deep-sea buckets, and are then pumped out, when the concrete filling is completed in the dry.

The work at Portland consists of two rest piers for a new swing span. Hard bottom is from 50 to 70 feet below base of rail.

The work on the Richelieu River comprises an enlargement of the present pivot pier, new rest piers for the swing span, twelve piers for fixed spans, and additions to the present protection crib work. Hard bottom is at varying depths, and where near enough to the surface single-walled caissons will be used. The new swing span is now in place.

CHECKING GRAIN LEAKAGE.

In a recent report to the Master Car Builders' Association, A. Kearney, assistant superintendent of motive power of the N. & W. Ry., of Roanoke, Va., made the following suggestions *apropos* cooping grain cars to prevent leakage. The work is so simple and inexpensive that every shipper of grain could well afford to so coop cars on his own account. The recommendations are as follows:

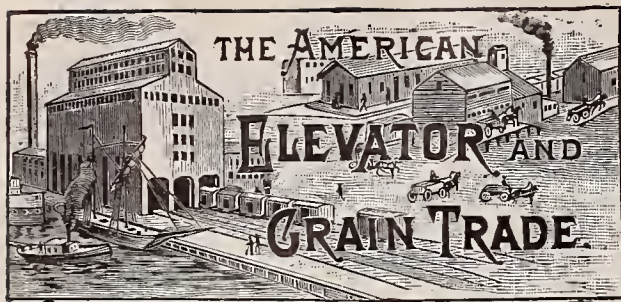
It is reported that the Galveston Wharf Co., Galveston, where considerable grain is exported, made a test inspection of 7,429 cars, which showed that 4,859, or 67 per cent, were leaking grain. Proceeding on this information, the Frisco lines have been experimenting on some means of overcoming this trouble. Grain doors are not entirely satisfactory, from the fact that the sides do not fit up as flush to the door posts as they should from the presence of bent over nails at that place. Experiments conducted with various means of protection led to the adoption of burlap at all leaky places. Eight ounce burlap at 4 cents a yard in 2,000 yard bales is used, it requiring about 15 yards per car, or about 60 cents, to fully protect the car against grain leakage. Investigation charges on a claim for losses would amount to more than this figure, even if the charge were not sustained. The inside of the grain doors is lined with 8 foot lengths of the burlap, overlapping the floor at the bottom and hanging over the top, the strips running lengthwise of the car. It is held in place with short wooden strips. The car inspector attends to both the placing of the grain doors and the fastening on of the burlap around the grain doors.

WHEAT PRICES IN ENGLAND.

The general trend of wheat prices in England since 1261 is shown in the following table. The English quotations are reduced to their equivalent in cents per bushel:

Decade.	Cents per bushel.	Decade.	Cents per bushel.	Decade.	Cents per bushel.
1261-70....	15	1481-90....	19	1701-10....	108
1271-80....	17	1491-1500..	16	1711-20....	114
1281-90....	16	1501-10....	17	1721-30....	111
1291-1300..	19	1511-20....	20	1731-40....	96
1301-10....	17	1521-30....	23	1741-50....	87
1311-20....	24	1531-40....	23	1751-60....	116
1321-30....	21	1541-50....	35	1761-70....	131
1331-40....	14	1551-60....	48	1771-80....	152
1341-50....	16	1561-70....	39	1781-90....	161
1351-60....	21	1571-80....	53	1791-1800..	211
1361-70....	22	1581-90....	62	1801-10....	294
1371-80....	19	1591-1600..	97	1811-20....	307
1381-90....	16	1601-10....	90	1821-30....	216
1391-1400..	16	1611-20....	107	1831-40....	174
1401-10....	18	1621-30....	114	1841-50....	163
1411-20....	17	1631-40....	131	1851-60....	167
1421-30....	17	1641-50....	141	1861-70....	154
1431-40....	21	1651-60....	118	1871-80....	154
1441-50....	16	1661-70....	124	1881-90....	108
1451-60....	17	1671-80....	126	1891-1900..	85
1461-70....	16	1681-90....	97	1901-10....	90
1471-80....	16	1691-1700..	144		

Prices between 1261 and 1580 are derived from figures taken from J. E. T. Rogers' work on Agriculture and Prices. The prices are taken from sales or purchases at all times of the year and from all parts of England. It is believed that payments were made by weight up to the time that Elizabeth reformed the currency, but the money values have not been reduced from what are supposed to be their nominal to what are supposed to be their real values. The prices from 1582 to 1879 are reduced from Oxford wheat prices, taken from Lloyd's collection (and quoted in Rogers' work), obtained from the register of the clerks of the Oxford market; from 1861 to 1910 English Gazette prices.—Crop Reporter.



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon applications.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, JULY 15, 1912.

Official Paper of the Grain Dealers' National Association
and of the Illinois Grain Dealers' Association.

PUBLIC ELEVATOR QUESTION.

The public elevator difficulty at Chicago has been adjusted for another year, and the "regular" capacity of the market has not been reduced. Yet the settlement is only a temporary one; for in 1913 the same questions may again come to the front to vex the market.

The laws of Illinois might be changed—or perhaps it is the constitution—to permit railroad corporations as such to operate grain elevators for the benefit of the public; and the law might require a carrier which finds it necessary to erect an elevator to handle at the terminal the grain it carries to the terminal to operate that house as a public utility complementary to its service as carrier, although one can readily think of some difficulties in the way of such procedure, such as the Commerce Commission's belief that a "transfer" service should be rendered within ten days. But state laws and the Commerce Commission alike recognize the necessity, as public conveniences, of elevators; and it would seem but a logical conclusion from the numerous difficulties obtaining in adjusting transportation equities growing out of transfer allowances, transit privileges, etc., that the carriers should be charged with the storage problem also. This practice is not unusual although carried on now by "subsidiary companies," so called; in the East especially it is familiar, and no valid objection has been made to the practice; rather, it has been as beneficial to the trade as, generally speaking, it has been satisfactory in operation. Certainly in view of the Commerce Commission's recent order fixing rates for all the details of service to be rendered by railroad elevators, including storage, it does seem anomalous that a public utility of this

pressing nature, actually provided by many carriers, because actually necessary to the conduct of their business, should be diverted by them to the private use of a few firms in certain markets, who may or may not elect at any time to deny their benefits to the great body of the trade. The law should confine private business to houses actually owned only by their operators; elevators built by railroads are quasi-public and should be held for the use of all the public. The common craze for turning such utilities over to "the government" might be checked for the time being by such an alternative.

THE REAL PROBLEM.

The crop improvement movement is not likely to be misdirected by those who are competent to lead it; but as in all such enterprises there is always a host of unattached volunteers not competent to lead but striving to do so, it is necessary to keep a keen outlook for the fallacious whose glitter usually attracts as many as does the pure gold of truth itself. Those, for example, who are endeavoring to direct this movement along the lines of European agriculture are really misdirecting, because our agriculture, broadly considered as a business, always has been and for some time to come must still be carried on upon the principle of large returns per man employed rather than large returns per acre. Only in urban truck farming is this principle reversed in this country and for obvious reasons,—in horticulture, as in European agriculture, the rule is intensive farming and large returns per acre, whereas as in agriculture our rule is extensive farming and large returns per man.

To explain: In England there is a little over eight acres of improved land for each person engaged in agriculture; in Germany, 10 acres; in the United States, 41 acres. In the United States most of the work of farming is done by machinery; in Europe most of it is done by hand (in Germany in 1895 only one farm in six had any machinery). Suppose these acres were planted to wheat, let us tabulate the result (1902):

	Acres farmed per man.	Average yield per acre, bu.	Production per man, bu.
England	8	31.9	255.2
Germany	10	23.5	235.0
United States ..	41	14.5	994.5

The production per man of oats the same year would be respectively 332, 449 and 1,176.7 bu., and no doubt the other cereals would tell the same story. In the course of time, no doubt, in this country, the production per man on the farm will be reduced and the yield per acre increased as the number of acres available per man is reduced; but at this time it is certain our farmers will not take kindly to intensive farming, which in the old country has driven the farmer youth to the more profitable employments of the city, as a much easier life on the farm and far greater rewards have been unable to keep young farmers on the farms of our own country.

The problem before the crop improvement workers is, therefore, how to teach American farmers of today methods to increase the production of their farms with the labor those

farmers are now using—how to increase acreage yields without increasing the units of labor employed per acre. Two men on 160 acres would doubtless produce twice as much grain as one man; even three might produce three times as much; but it is almost an absolute certainty that four would not produce four times as much as one, and although four would no doubt produce more in the total than two, it probably would not pay to work more than two or three men.

This, then, is the real problem: to increase the productive capacity of each labor unit employed over and above the present output of the same units. If the crop improvement teachers can do that, the movement will be, not a paper success, but one in very truth, although it may not for a generation bring our grain production per acre up to the apparently high European average, which is acquired only by a disproportionate amount of labor per acre and bushel, compared with our own lower acreage yields.

THE HAY CONVENTION.

Kansas City is getting ready to entertain a very large convention of the National Hay Association, the program of which appears in another place and to which the reader's attention is directed.

This great Association rarely disappoints those who attend its annual meetings; and although Kansas City in the latter part of July may be warm, those who go there this year will be well repaid. A souvenir program, just received from the Kansas City Hay Dealers' Association, giving further details of the convention, throws a still more tempting color over the prospective event which will be enlivened by numerous delightful entertainments.

SOCIAL APPEALS TO THE GRAIN MEN.

The admirable address by President Eikenberry, of the Ohio Association, page 22, is worthy of careful reading and assimilation. His remarks on the social unrest of the times and the crying need of sober and intelligent treatment of the social problems of the day are peculiarly *apropos* at this hour. This is the age of agitators who fearlessly attack everything that is established, and in the search for causes and remedies for conditions they don't quite understand and that can be remedied only by the ablest and most far-seeing statesmanship, are filling the public mind with innumerable heresies and false beliefs that are doing the country inestimable harm.

Mr. Merrill in his address to the Council, p. 12, proceeded along somewhat similar lines to point out the need of the hour to encourage greater production of food stuffs as a means to stem the current of unrest created by the pinch of the high cost of living; and he appealed, as did Mr. Eikenberry, to grain men to awake to their duty in this connection and to do it.

The addresses of both gentlemen call to mind a remark by Governor, now Justice, Hughes, in a Yale lecture, that one of the great dangers to our institutions is the indifference of our people to the obligations of citizenship, traceable in part to the "optimistic feeling that nothing can go seriously wrong with us." On the con-

trary, as the tendency now seems to be toward more democracy, the slogan of the new Roosevelt party, and away from representative democracy, the danger grows more imminent, and the greater becomes the need of the active participation of thinking men in all these great reform movements.

To grain men especially, whose business is in constant menace from the half-trained agitators, these addresses, as well as Mr. Reynolds' report on p. 19, should appeal with compelling force, because they show us that the country members of the trade have an immense direct interest in trying to work out these problems that now confront the country in an intelligent and statesmanlike manner, not to ease up the temporary and uncomfortable pinch of today, but to establish our social fabric and the laws of commerce and trade on a firm and unassailable foundation of sound economics.

A POLITICAL PLANK.

The anti-grain-speculation plank of the Democratic platform is one of those catchy "principles" that are forever in use by platform builders. It is quite in keeping with the thinking of quite a number of rural statesmen who are always engaged in the attempt to put salt on the wary voter-bird's tail; and it is not impossible that a vote on the Lever bill in the House at this session would pass it. But we believe there is still enough conservative and sane opposition in Congress, at both ends of the capitol, to defeat any legislation of that nature; the more so because, thanks to the fact that farmers are now becoming interested in practical grain handling, they are ceasing to clamor for the abolition of a business function of which they may themselves now make use to their own business advantage as grain shippers. They know that grain gambling is largely a figment of the imagination, now the open bucket shop has quit.

ILLINOIS WATERWAY.

The establishment of a line of boats by Joy Morton of Chicago to carry salt from Chicago through the old Ill. & Mich. Canal to Illinois River and beyond has reawakened interest in the improvement of that canal; and it is encouraging to note that at least one canal-river town newspaper at Ottawa has, after some years of chasing the will-o'-the-wisp of the 14-foot channel in Illinois River, with its 20 millions of cost, begun to advocate the renovation of the Ill. & Mich. Canal. With the Chicago Drainage Canal available to Joliet, about half the length of the old canal, now ready for use, it would be a simple and very cheap matter to enlarge the old canal to carry a 1,000-ton barge like the new Erie Canal. For the most part no rock cutting would be needed, and with Portland and hydraulic cements made along the line and rock, sand and gravel abundant everywhere, the cost of enlarging about ten locks would be insignificant compared with the cost of the Erie enlargement or building the 600-ton Hennepin Canal over the hills from Bureau to Rock Island, while to Illinois the benefits would be enormous. The enlarged canal, once open, would, as did the old canal when in commission, hold down freight rates over at

least one-half the state, and for years to come make impossible any such increases of grain rates as the Illinois roads are now endeavoring to make. An appeal to the Government on this behalf would probably meet with a better reception than former ones to build a ship canal through Illinois, where no ships would ever sail, when Congress knows that the so-called Illinois River waterway is 90% a water power scheme for private benefit and only 10% waterway.

INSPECTION IN KANSAS.

The Kansas Supreme Court having ruled that the state inspection law cannot be enforced except as to grain going into public elevators, of which there are none in the state, the trade is now reduced to the necessity of arranging its own method of umpiring deliveries of grain sold on contract; and the exchanges and local "boards of trade" in the state are taking steps to fill the vacuum.

This is, of course, only a return to first principles—to the old-time notion that "the state" *per se* has no interest in legitimate private contracts except when its citizens appeal to its courts to settle disputes relative to them. The Supreme Court of the state of Washington once made a similar decision. The doctrine of non-interference is sound enough, in itself, no doubt; but when, as in Illinois, Missouri and Minnesota, a vast number of daily "umpirings," so to say, is absolutely necessary to the conduct of commerce and trade in grain, "the public," as the legislature for this purpose has been pleased to call the grain trade, has consented to the state's assumption of the office of umpire without serious objection. Probably "the public" of Kansas also would have been satisfied to do the same, if the court had but declared unlawful the excessive fees provided for by the act; but that is exactly what the court did not do.

Whether or not the Kansas grain dealers have been gainers by the decision remains to be seen. If the decision shall make permanent the temporarily adopted custom of selling Kansas grain by sample only, no great injury will be done the trade or the farmers; and this system ought to be entirely satisfactory to the millers, who, instead of acquiescing like the dealers, are now trying to do some impossible things to the farmers, by using the machinery of the Board of Health to stop farmers from hauling screenings to town!

SPECIAL PLEADING.

The "Country Gentlemen," which, under its new management, is rapidly descending to the status of a purveyor to the farmer of economic twaddle, has taken up the subject of "Federal grain inspection"; and with the assurance of one of Mr. Bok's feminine contributors hands out to its readers a "line of talk" on "inspection" that is really a most artistic garbling of the testimony taken recently at Washington as reported in these columns a month ago. The object of the C. G. article was to demonstrate, by the use of the very words of Messrs. Culver, Cornelison and Reynolds, how very cleverly they were trying to "pull the wool over the

eyes" of Congress to prevent National inspection and to continue what is called "sharp practices at grain markets"; and the result is a very specious article. The iniquity of the trade is proven (?) by the use of that queer statement of receipts and shipments of wheat at Minnesota markets made by North Dakota bankers years ago—141,455.10 bus. No. 2 Northern received, 467,764 shipped, etc., on which Senator McCumber originally based his ingenious but unsound argument for inspection. All this testimony, says the Country Gentleman, "translated into man-to-man talk means, 'We are safe from Government control for a while yet.'" All of which goes to show that the ignorant or malicious agitator has in these days welcome entry anywhere to a publication that caters to the farmer and is farming him to its own profit.

A LEGAL ANOMALY.

In the action at Kankakee against the agent in charge of a Chicago commission firm's branch office, a plea of guilty was entered in June last to an indictment for operating a bucket-shop; and a fine of \$300 and costs was entered and paid. Other indictments of other parties on the same complaint were then pending. These cases illustrate the way certain transactions, legitimate elsewhere, have been made indictable offenses under the law in Illinois. The branch offices were not, in fact, bucket-shops at all; the orders taken there were undoubtedly executed on 'change, otherwise the principals, members of the Board, would have been subject to discipline as members. But Illinois has by statute declared that orders placed at these outlying branch offices shall be deemed *prima facie* "gambling" transactions, and therefore accepting them is an indictable offense; whereas, the same orders, placed at the same principals' offices in Chicago, would be held *prima facie* to be legitimate. These two views of the statute have been sustained by the Supreme Court. The distinction involves a fine point in casuistry, but it is settled law in this state just the same: an inconvenient fact that one may stub his toe against once in a while.

FARMERS' CONTRACTS.

Idaho is so new as a grain shipper that her farmers are just learning that a contract for the purchase and sale of grain may be enforced by either party to it. At least, a large part of the state is now interested in the attempt of a firm of grain buyers to enforce a contract for the delivery of certain barley contracted verbally to be delivered at a certain price, as evidenced by a duplicate pencil memorandum signed by the buyer only, but which grain was not delivered when the price had advanced. The farmer lost his case, but he has appealed for a rehearing on the ground that no plea was set up by him at the trial that the statute of frauds of the state provide that both parties to contracts involving over \$300 must sign the document. To avoid the dilemma this season of the case at bar, all contracts in that state will be more carefully drawn; just as they should be in all places and by all parties who make such agreements, so that neither party can legally "renig" when the price changes.

EDITORIAL MENTION

Are you saving your vacation time to spend it at Norfolk on October 1-3, when you can enjoy it?

Are you cleaning and disinfecting with carbon bisulphide to have the house ready for new grain? This is the time to do it.

Lightning is again taking an occasional rap at an elevator whose owner has no faith in rodding for protection against this shocking intruder.

There is a pleasing prospect ahead for Kansas grain shippers when railroad officials, even before the wheat crop began to move, predicted a car shortage within a month after harvest should put the grain on the market.

On page 658, June number, first column, Mr. Hymers was made to say to the Illinois convention that his firm ceased to charge interest on advances on the day after "inspection" of the grain. It should have read "unloading" of the grain.

By the smallest primary vote polled in years E. G. Dunn has been nominated as Democratic candidate for governor of Iowa, on his record as a fighter of the "grain trust," a combat royal, quite as memorable in its way as Don Quixote's raid on the windmills.

Practical corn dryers who find difficulty sometimes with the cooling of the dried grain, are given a useful hint in the article on Rosenbaum Bros.' new drier at Toledo. The science of drying grain is rapidly coming to be an exact one, now that working dryers are finding out just what can and cannot be safely done and how to do it, and the hints of builders of driers should be eagerly absorbed.

The Grain Growers' Association, after August 1, is to operate the Manitoba government's 172 grain elevators, paying annually for their use \$66,000, or 6% on an estimated valuation of \$1,100,000; the company is given, however, exemption from taxation. As there have been some indications of friction of late within that Company, this experiment of co-operation on a wholesale scale will be watched with some interest, to see if the province is stepping from the fat into the fire.

Certain "progressive" newspapers are advocating public ownership of grain elevators in this country in spite of the failure of that experiment in Manitoba,—a fiasco for which the apology is made by the Christian Science Monitor that the Manitoba test had not been given "a decent chance to work itself out successfully" (*sic*). It is urged that "conditions on this side are quite different. The public on this side has been gathering confidence in itself," etc. Any current view of this matter we have seen overlooks the essential difficulty of the problem: that of locating responsibility for the management. The "public" conduct of utilities dislocates and dissipates responsibility—

what is everybody's business is nobody's business, from the nomination of a party ticket by a "direct primary" on to the end of the gamut.

The Council of Exchanges is still struggling with the uniform rules proposition, making some progress, but only slowly. The committee's difficulties show how hard it is to change the established usages of the markets that have become habitual; and for that reason those who desire certain changes, however desirable these may be in themselves, must cultivate public opinion and then have the patience to wait for changing opinion to become concrete and to express itself, as it will at last, in the form desired.

The wisdom of bringing to the grain trade meetings from time to time the members of the working force of the Bureau of Plant Industry is seen in the friendly attitude of the Bureau toward the trade while working out the problem of standardizing the cereals grades. The address of Dr. Duval to the Council and the paper of Dr. Galloway at Indianapolis point to a wholesome recognition by the Bureau of commercial conditions when those standards are finally promulgated that is probably the direct result of this contact of personalities.

Some of our temperance people have become unduly excited by a purported manufacture of 172,221,169 gallons of whisky and 2,022,600,000 gallons of beer from 60 per cent of 3,700 million bushels of corn, as an explanation of the high cost of living. As a matter of fact, 50 million bushels would probably be a liberal allowance of grain for the distilling and brewing interests; so that it is not so much the disappearance of the corn in that way that causes the high cost of living as hitting the booze and the stein increases the cost of high living.

An important hearing was begun by the Commerce Commission at Chicago on the 10th, at the invitation of Chicago, to enquire into the equity of a transit rate of 7½c on flour Minneapolis to Chicago, when wheat moving over the same routes pays 10c. The hearing appears to have developed the fact that the rate has been given on flour milled from wheat not entitled to the transit privilege, which, of course, amounts to a special discrimination and emphasizes the difficulty of administering the transit equities where carelessness or studied deception obtains.

The Soil Fertility League's notion that the farmers "receive less consideration from the Government than any other class of citizens" is hardly sustained by the appropriation bill in support of the activities of the Agricultural Department—\$17,656,976 in the Senate bill. Look at some of the items: "Investigations and experiments in animal husbandry, \$52,180"; "co-operative experiments in feeding and herding, \$100,000"; "investigations of plant diseases," etc., \$6,570 increase this year over last; "improvement of ginseng and control of its diseases, \$5,000"; "collecting and testing rare seeds," etc., increase this year of \$49,320 over last year, with \$10,000 extra "to improve cereals and methods of cereal production"; and so on. Not one of the farmer's

problems has been slighted. But what appropriation bill does the same kind of service for the miller, the baker, the shoemaker, and the thousand and one other classes of workers at their trades in the towns?

Mr. Reynolds is only partially right when he says that a bill of lading law can be made effective only by National legislation. On the contrary, this is one of the matters as to which legislation is required by both National and state legislatures, as only in that way can the laws of commerce be made uniform throughout the country and intelligible. As a means to that end the Bankers' National Association and the Uniform State Laws Association have already gotten the Pomerene bill through several legislatures and are engaged in the work of having the bill enacted by all the states, as well as by Congress, as the only final settlement of the bill of lading problem.

An up-state grain shipper has put before the Savannah Grain Exchange, as a problem in business ethics, the question whether the carelessness of one of its officials, resulting in expense to the petitioner, should not be made good by the Exchange. The shipper loaded 32,732 lbs. of oats, which on arrival were said by the railroad to weigh but 29,754 lbs. "and no more," and the Exchange official made certificate that this was the correct weight. Notified of the shrinkage, the shipper proceeded to Savannah and had the car reweighed, when it weighed 32,732 lbs. Now he asks that his traveling expense and attorney's fees, \$62.75, be made good. Hasn't the shipper made out a good case?

The aggressive campaign of the co-operative secretaries is having its effect on the creation of new companies, especially in the Northwest; and their personal work seems to be supplemented by the endless talk, heard everywhere in the discussion of social questions, of the need of "co-operation" in general terms. There is fortunately less and less of the old demagogism that called all grain dealers robbers and pickpockets and more effort to reduce the farmers' elevator investment to a purely business proposition. When it does become that, no one can rightly find fault with it; for it then becomes a question of survival—the farmers' or the regular house. In the long run, we'd bet on the latter as "the better horse."

The Southern Kansas Millers' Club has decided to appeal to the State Board of Health to stop farmers selling wheat containing weed seeds and other foreign matter, including broken kernels, because the state feedstuffs law prevents the sale of this offal except as branded true to character. Isn't this merely trying to unload on the state officers the sometimes disagreeable necessity of the miller and dealer of refusing to have an argument or a row with a farmer about the quality of his wheat? Why not pay the farmer who delivers clean grain a premium, or what the grain is worth; and make the farmer who offers dirty grain stand the shrinkage shown by the milling separator when it is unloaded? Would not that be the better part, rather than get the farmers up in arms by

a rather arbitrary enforcement of a pure food law in a direction never contemplated?

At any rate, the farmers' elevator company method of cultivating good fellowship by a frequent social gathering of shareholders is one that needs no apology as a means for cultivating business harmony "inside the party."

Indications of acreage and condition in Canada point to a wheat crop of 200 million bushels. In view of the experience with 170 million bushels a year ago, one wonders what will be done with it—how it can be gotten to market.

Does oats raising pay in Illinois? asks the experts at the University, who seem to have doubts on the subject. Perhaps this year's crop will answer the question. At any rate, there is no use in getting excited over the doubt just yet. Farmers sometimes take these academic questions less seriously than do the experts.

Now, don't sell everything in sight before it is in sight, because the "sight and unseen" method of trading always has been a gamble, even in trading jackknives. Moreover, with a bumper crop of wheat in the West and Northwest and of oats everywhere, the certainty of getting cars as needed is reduced to a minimum.

The planting of untested seed corn last spring reminds one of Disraeli's definition of a second marriage: "The triumph of hope over experience." In a certain Illinois county, it is said, more than 2,400 acres were planted to corn with seed from a single crib that the owner's judgment, unassisted by test, said was "good seed." All these acres had to be replanted. Think of it, after all that the experts had said in warning about the possible character of untested seed corn.

An unusual accident happened recently at a dairy farm near Cincinnati, that resulted in the deaths of five persons, in a silo, overcome by carbon dioxide gas, developed by fermenting brewers' grains placed there. This unfortunate affair ought to put a stop in that neighborhood to feeding wet brewers' grains or distillers' slops to dairy cattle. The wet grains are not a proper food, even when perfectly sweet, and their use is worse than a waste; whereas if the grains are dried they are in every way desirable for feeding purposes.

It is hoped the reader will not feel aggrieved at the length of some of the convention reports in this number, nor skip them as something they may have seen in part before in a contemporary of the trade press. The fact is that very little of what appears in these convention proceedings has as yet been printed anywhere else, because our contemporaries have found it expedient or necessary to "cut" their reports to the limit; besides, every good convention develops a great deal of good matter that must be left out in an ordinary press report because of the actual lack of space. This is mentioned in explanation to some whose papers we have received but not yet printed; and also to warn readers who may be disposed to cut the reports

in the reading that if they do so they will deliberately overlook many things of solid worth to themselves.

Gibson County, Ind., set apart June 10 as rat-killing day. The record has not come under our eye, but in 1911 the total was about 3,000 rodents put out of the way. It is a laudable example, but can hardly be more, until Gibson farmers are joined by their neighbors and their neighbors' neighbors to the last remove to the farthest confines of the Nation. The keep of the rat is an enormous expense, estimated by millions of dollars annually, and he is a frightful menace to public health; but a more sufficient means of destruction than a "rat hunt" must be resorted to if the pest is to be measurably decreased, much less abolished.

The Kansas Supreme Court orders the return of \$20,000 grain inspection fees deposited with the clerk of the court during the hearing of the inspection case; but \$8,000 more, collected from five elevators in Kansas City prior to December last, when they changed from public to private elevators, the court ordered paid to the state grain department. The expenses of the litigation are made a charge upon the contingent fund of the inspection department or upon the governor's contingent fund, and if these funds are not large enough to liquidate these expenses, the costs will have to await an appropriation by the legislature. Thus the Stubbs "up-lift" grain office administration seems to have been hit "fore and aft."

Another attempt to resurrect the Mississippi River grain traffic between St. Louis and New Orleans came to grief recently, when the Miss. Valley Transportation Co. of St. Louis went into the hands of a receiver. The Company was established in 1908 and made a real effort to re-establish that form of commerce, but it is evidently "no go." Occasionally a cargo of grain may move southward in that way, but our modern ways of doing business are all against the use of the river routes; and probably not until the cost of rail carriage returns to the old time level that then made the river the cheaper and indeed the only route will this traffic again flourish to any considerable degree.

No one will find fault with the purpose of the National Ass'n of Farmers' Elevator Company Managers to reform as they are able the crop reporting service, by taking a hand in it themselves. There are said to be about 600 of them, chiefly in the Northwest, altho' there are members in nine states, and their reports would undoubtedly be valuable data, just as the state reports by Secretaries Strong, Wells, Smiley and Gibbs are welcome additions to the volume of facts of which the Government, or such men as Goodman, Snow and other experts at this business are able to make synthetic use. But we are sure that a candid study of the recent articles on crop reporting, contributed to this paper by Mr. P. S. Goodman and to the Illinois Association meeting by Messrs. Goodman and B. W. Snow, will convince the student that "crop reporting" is something more than merely "lumping" the guesses of 600, or even 6,000, farmers or country dealers.

There cannot be too many truthful local reports as a means to arrive at the whole truth, but only the honest expert can really interpret them in terms of a grand total that will have any real value to anyone.

It probably is no use to argue with the Georgia State Board of Health that the presence of pellagra in that state is not necessarily due to the fact that improperly cured or unsound corn may have been consumed in the state, if they really believe there is a relation here of cause and effect. Other competent persons have declared corn "not guilty," but their judgment doesn't happen to impress the Georgia pundits. It is enough here to say to the shipping trade that the Board has recommended to Gov. Brown that a law, similar to that of South Carolina, be enacted for Georgia that will enable the Board to seize and destroy corn shipped into the state that the Board considers unsound or dangerous to man and beast.

As a "law" seems to be the only remedy in these days for all the evil results of men's personal carelessness, we may expect a demand now in Missouri for a "blue sky" law to protect investors in co-operative companies. It seems that at Princeton a company was organized and about \$10,000 paid in by seven farmers who then turned the management over to two rascals who decamped and carried the books and the kittie with them. As these are said never to have been audited or ever seen by the shareholders, their books' whereabouts is probably unimportant. The parties who are creditors to the extent of \$8,000 to \$10,000 did "keep books," however; and that's the rub. The stockholders have had the experience. It may prove to be worth the price.

A shrewd advertising manager of a bright publication once said to a customer, whose advertisements contain testimonials of the machine offered for sale, that showed apparently impossible savings of labor cost, that he would get better results from his publicity by cutting the statements in half and bringing them down to something the people generally would believe. One would think some of the promoters of co-operative concerns would take the same hint. Mr. Dunn, for example, now perambulating Iowa, tells the farmers that co-operative elevator companies have saved the farmers of that state millions of dollars and supports his claim by reciting the history of a great grain company that went out of business in Iowa before co-operation was heard of in the state except perhaps at Rockwell. Co-operation can gain nothing by such statements, any more than a sane farmer can be made to believe that the Washburn-Crosby and Pillsbury mills and the Quaker Oats Company drove the small mills out of the same state, when the farmer who knows the facts remembers that he himself drove out all that were driven from the state by ceasing to grow wheat for them to grind. If Mr. Dunn would but cut his extravagances down about 75%, there might be found some perfectly sane men who might believe his particular cause worth considering, wide as he still might be from the facts.

TRADE NOTES

The Grain Elevator Specialties Co., Ltd., manufacturer of the Elevator Automatic Alarm Signal, has incorporated at Winnipeg, Man.

J. L. Owens Co., manufacturer of grain cleaning machinery of Minneapolis, Minn., is contemplating locating a factory at some point in western Canada.

The Avery Scale Company of North Milwaukee, Wis., has removed its Chicago office from its former location in the Traders' Building to room 726 the Monadnock Block. J. J. Ahrnsfield is now the Chicago manager.

N. C. Webster, until very recently connected with the Avery Scale Co. of North Milwaukee, Wis., has associated himself with the Richardson Scale Co. as special representative for New York and Canada with offices at Buffalo, N. Y.

The Union Iron Works of Decatur, Ill., is pushing the work rapidly forward on their new buildings which they expect to have completed by August 1. The new additions comprise a machine shop, foundry, shipping room and warehouse.

The Ellis Drier Company of 732-734 Postal Telegraph Building, Chicago, has just issued a pamphlet illustrating and describing the Rosenbaum Brothers' Drying Plant at Toledo, Ohio, and the Langenberg Brothers' Drying Plant at St. Louis, Mo.

The Burrell Engineering and Construction Co. of Chicago has opened an office at 1125 Chamber of Commerce, Detroit, Mich. This branch has been established because of the company's rapidly increasing business in the territory tributary to Detroit.

The Barnard & Leas Mfg. Co. of Moline, Ill., is showing on a small pamphlet its Easy Car Pusher, which is one of the most popular devices for moving cars on the market. It will work on any car and under any brake, is strong and durable, and rough, greasy, icy or wet rails do not affect it.

Our news departments contain this month the usual number of new contracts for grain elevators closed by the Burrell Engineering and Construction Co. of Chicago. This well known building firm is busier than ever before at this time of the year, which is a testimonial of the character of the grain elevator construction work done by this house.

Our front page article for this month is a description and illustration of the new Saxony Milling Co.'s grain elevator at St. Louis, Mo. This elevator is one of the best types of the concrete houses built by the Macdonald Engineering Co. of Chicago, which has constructed so many new concrete houses in various sections already this season.

A very interesting account appears in this issue of some of the Canadian work of the John S. Metcalf Co., Montreal and Chicago. Its work for the Harbor Commissioners of Montreal has extended over a period of years and embraces vast improvements, the expenditure of large sums of money and the continued employment of a great force of workmen.

Users of the Climax Scoop Truck, manufactured by the Detroit Scoop Truck Co. of 2237 West Jefferson avenue, Detroit, Mich., have found it to be one of the most serviceable devices embraced in the grain elevator or warehouse equipment. It is a scoop on wheels and when it is seen that with it a boy can do more than five men with hand scoops its time and labor saving qualities are clearly shown. The nominal price of the scoop makes it available for every elevator owner.

General Catalogue No. 82 of the Jeffrey Mfg. Co. of Columbus, Ohio, has just been issued. It embraces elevating, conveying, power transmission machinery and coal mine equipments. The title page is followed by a double page illustration of the company's large plant at Columbus and the 575 pages of the catalogue are replete with illustrations of the specialties along elevating, conveying and power transmission lines, which this company manufactures. Most handsome, concise and serviceable are terms that should be applied to this "Jeff-

rey" latest catalogue, a copy of which for reference will be mailed to any elevator operator on request.

The Wegner Dryer Co. has been incorporated at Buffalo, N. Y., with a capital stock of \$50,000 to manufacture drying apparatus for grain cereals, etc.

W. H. Salisbury & Co. of 105-107 South Wabash avenue, Chicago, report the following testimonials as to the exceptional merits of "Salisbury" Solid Woven Rubber Belting in substantial orders as follows: The Acme Malting Co., Chicago, 727 feet of 18 inch 7 ply, 192 feet of 30 inch 4 ply; the Iron City Grain Elevator, Pittsburgh, Pa., 275 feet of 14 inch 7 ply, 102 feet of 24 inch 4 ply; the American Milling Co., Superior, Wis., 963 feet of 22 inch 6 ply, 305 feet of 10 inch 5 ply; Vallier & Spies Milling Co., St. Louis, Mo., 744 feet of 18 inch 7 ply, 508 feet of 30 inch 4 ply, 68 feet of 30 inch 5 ply.

The bill for creating a grain harbor at Odessa recently passed the Imperial Russian Duma and those interested in it state that it is almost certain to be approved by the Imperial Council. The new Odessa-Bakhmach railroad, which will be opened for traffic in November, 1913, will not only have a station at the port but will also build grain elevators in the new grain port. It is the company's intention to do its utmost to attract grain to Odessa, not only from central Russia but also from more northern regions. Details and plans of the proposed new grain harbor may be had from the Bureau of Manufactures at Washington.

SPOILED CORN IN GEORGIA.

The Georgia State Board of Health on July 3 sent to the Governor a resolution requesting legislation against the admission of tough corn and other cereals into that state. The board does not say that sour corn is the, or a cause, of pellagra, but urges legislation, says the Atlanta "Constitution," "upon the broad ground of health, taking the view that it is the duty of the state to protect the people against an unquestioned source of sickness both in man and beast. The resolution adopted by the board is as follows:

Whereas, The attention of the State Board of Health has been called to the fact that deteriorated corn and other cereals have been, and are now being, imported into the state for consumption by man and beast, which have, and are, producing diseases in both, and the continuation of this importation is likely to cause such diseases further spreading throughout the state; therefore, be it

Resolved, That the State Board of Health respectfully call the attention of his excellency, Joseph M. Brown, governor, to these facts, with the request, if in his wisdom he deems it advisable, to send a special message to the legislature of Georgia requesting the enactment of a law which will provide for the inspection of corn and other cereals; and when said corn and other cereals are found to be deteriorated and dangerous to the public health, that the power of condemning said grain be given to such department of the state as may be deemed best suited for the administration of this office; and further, to provide sufficient appropriation for the conduct of this inspection.

KANSAS INSPECTION LAW.

The Kansas Supreme Court has published a decision holding that the state grain inspection law cannot require inspection of grain except that going into or coming out of public elevators and that Kansas City houses are not public elevators. This decision practically abolishes state inspection in Kansas and some new system will have to be provided. There being no funds to pay state inspectors they have nearly all been dismissed by the inspector. The decision is very favorably received by the state as a whole.

Hans Thompson is solicitor for the Randall, Gee & Mitchell Co. of Minneapolis, having resigned his position as manager of the Farmers' Elevator at Raymond, Minn.

W. V. Willey, who has managed Creig & Zeeman's elevator at Kenneth, Minn., the past eight years, has succeeded Mr. Conway as manager of the farmers' elevator at the same place.

COMMISSION

The McCullough Grain Co., of Wichita, Kan., has opened a branch office at Hutchinson, Kan. John Holmes is in charge.

The Anchor Grain Co., composed of S. B. McClaren and C. E. R. Winthrop, has engaged in the grain business at Wichita, Kan., with offices at 209 Sedgwick Block.

O. A. Boyle of the Boyle Commission Co., of Wichita, Kan., has purchased a membership on the Wichita grain exchange and will add grain to their other lines of business.

Lipseley & Co., grain merchants of Chicago, have incorporated. Capital stock is \$50,000. The incorporators are David Howard Lipsey, Wilson F. Henderson, L. G. Vincent.

Logan & Bryan of New York and Chicago opened a branch office for the summer on July 1 at the New Monterey, North Asbury Park, N. J. It is under the management of Claude A. Dickie.

Goodrich Bros. Hay and Grain Co., of Winchester, Ind., has filed a notice of the increase of the company's common stock from \$75,000 to \$100,000 and also of the issuance of \$100,000 preferred stock.

The Producers Grain Commission Co., Ltd., of Winnipeg, Man., has been incorporated with a capital stock of \$100,000. The incorporators are R. D. Smith, J. B. Crepeau, W. F. Guild, H. R. Drummond-Hay and Marshall Anderson.

The Wilson-Drummond-Biddle Corporation of Norfolk, Va., is a newly organized firm to engage in the hay and grain business. Capital stock is \$15,000. The officers are H. P. Drummond, president; F. C. Miller, vice-president; R. C. Biddle, secretary and treasurer.

F. G. Fendelman of the firm of Mason-Gregg Grain Co., of Kansas City, has joined the Omaha Grain Exchange at Omaha, Neb., and opened an office in that city to conduct a general grain receiving and shipping business. He retains his interest in the Kansas City firm.

Charles E. Lewis, of Charles E. Lewis & Co., of Minneapolis, Minn., recently had the satisfaction of seeing a town in Wisconsin named after him. It is located on the Soo road about 77 miles from Duluth and is 1½ miles from Mr. Lewis' summer home. It is marked at present by a 25-foot flagpole, but Mr. Lewis declares it will grow to a large metropolis.

J. C. Cusenbolder, who has been "riding on the wings of Pegasus" with one of the grain journals for some time past has descended to terra firma and is now associated with the Ward Grain Co., of Lima, Ohio. Mr. Cusenbolder, like his father of Sidney, is an experienced grain man and will be a valuable acquisition to any firm with whom he allies himself.

A convention reminder in the form of a full length portrait of a lady was mailed early in July to the friends of H. G. Morgan, the Pittsburg hay man, Pittsburg, Pa. Of course the convention referred to is the annual meeting of the National Hay Association to be held at Kansas City July 16, 17, 18, and Mr. Morgan will be there with his genial personality to greet his friends.

Frank I. King of C. A. King & Co., Toledo, Ohio, writes characteristically in his market letter of July 6 that the goblins seemed to want to make shades of him by the introduction of typhoid germs within the month, but that he had shaken them off and the family lot in the cemetery was still unpurchased. There was also a wise talk in the letter about wheat for millers from our Boy Solomon. In fact, every letter has something good and worth reading.

J. J. Fones who is well known in Chicago grain circles is now in charge of the cash grain department of E. W. Wagner & Co., of Chicago. Mr. Fones was for 10 years formerly with W. S. McCrea & Co., of Chicago, and later had charge of the general commission business of the Northern Grain Co. He served six years on the arbitration committee of the Chicago Board of Trade and was for two years one of the three members of the state board of grain appeals. Mr. Fones is a recognized judge of grain and has had extensive experience in the grain business.

Z. Steel was elected manager of the Farmers' Elevator at Lane, S. D., for the ensuing season.

Arthur Harris of Clinton, Ill., is manager of the Virden Grain Co. at Virden, Ill. He succeeds James Bradway, who has gone into the elevator business with William Bailey at Macon, Ill.

C. W. McFarland has resigned the management of the Farmers' Union Warehouse at Palouse, Wash., and he has gone into the grain buying business independently. His successor is W. D. Powers.

W. Shonten has resigned the management of the elevator at Thorpe, Iowa, to accept a similar position in the Farmers' Elevator at Rock Valley, Iowa, made vacant by the resignation of John Harmelink.

Milwaukee leads as the chief barley market of this country. Sec'y H. A. Plumb's recent report for the Chamber of Commerce year being receipts for 1911 of 13,486,510 bushels. This quantity of barley is under the average of several years back, owing to poor crop conditions in the Dakotas, Iowa and Minnesota, the sources from which Milwaukee draws a great portion of its supplies. A serious shortage occurred in other important barley growing states. To Wisconsin belongs the credit of having produced more rye in 1911 than any other state, 18 per cent of the total crop of the United States, or 6,935,000 bushels. The five states that harvest 69.2 per cent of the entire crop are: Wisconsin, 18.2 per cent; Michigan, 17.6 per cent; Minnesota, 13.6 per cent; Pennsylvania, 13.0 per cent; New York, 6.8 per cent.

ELEVATOR AND GRAIN NEWS

ILLINOIS.

A new elevator is being constructed at Elvas-ton, Ill.

An addition is being made to the elevator at Mazon, Ill.

Oscar H. Rink will erect a \$10,000 grain elevator at Edinburg, Ill.

The Morris Grain Co. is erecting a 25,000-bushel elevator at Morris, Ill.

Spellman & Co. will place a larger boiler for their elevator at Lawndale, Ill.

George Emerson & Son have leased the Elias Willets Elevators at Joy, Ill.

Wm. Cliggett is installing a Hall Distributor in his elevator at Oswego, Ill.

J. E. Collins has sold his elevators at Atwood and Pierson, Ill., to Horton Bros.

R. G. Gaskin is putting the elevator at Danville Ill., in fine shape for business.

The elevator that John F. Daly is remodeling at Philo, Ill., is nearly completed.

An elevator will be built at Wood's Crossing, eight miles from Monmouth, Ill.

G. W. Walker & Co. are building an addition to their elevator at Gibson City, Ill.

A new elevator is being erected at Wendel, Ill. It will have a capacity of 15,000 bushels.

The Biggs & Lynn Grain and Elevator Co. will erect a \$150,000 elevator at Springfield, Ill.

An addition has been made to the elevator at Ludlow, Ill., increasing the capacity to 100,000 bushels.

The new elevator at Ivesdale, Ill., mention of which was made in the June issue, is practically complete.

Work on the new elevator at Clayton, Ill., is progressing rapidly. The structure will be modern in every respect.

The Union Iron Works, Decatur, Ill., have bought two Hall Signaling Grain Distributors for one of their customers.

The St. John Elevator at Utica, Ill., has been purchased and opened for business by a farmers' company, the manager being Charles Cockran.

J. C. Dewey has sold his west elevator at Annawan, Ill., to the Farmers' Grain and Supply Co., which will remodel and enlarge the building.

Thos. Hoadly, of the firm of Scott & Hoadly, is now sole owner of the elevator at LaFayette, Ill., having purchased the interest of the Scott heirs.

Inkster Bros. are making repairs on their elevators at Herscher and Boyer Siding, Ill. The work is being done by the Burrell Engineering & Construction Co.

Roy H. Jones & Co. incorporated at Lodge, Ill., by John Kirby, Roy H. Jones and John W. Dayton. The company is capitalized at \$10,000 and will deal in grain, hay, seeds, etc.

Maddon Brothers of Delray, Ill., are building a new roof on their south elevator and making other repairs. The contract was placed with the Burrell Engineering & Construction Co.

The Burrell Engineering & Construction Co. is making repairs on D. P. Hill Grain Co.'s elevator at Eldena, Ill. The improvements will include new automatic scale, legs, dump, etc.

The Farmers' Elevator Co. has incorporated at Dwight, Ill., with a capital of \$15,000. It proposes to have its own grain elevator in operation soon. The officers are: President, John Schroberger; secretary, Martin Hoffman.

The La Moille Farmers' Co-operative Society has incorporated at La Moille, Ill., capitalized at \$3,500, to deal in grain and farmers' supplies. The incorporators are H. M. Stacy, Richard Hall, J. M. Rapp, L. A. Hetzler and B. F. Bash.

G. W. Stapp has purchased the Buckley-Pursely Elevator at Peoria, Ill., and will immediately erect a new one just east of the present structure. The new building will be 20x24 feet on the ground, 24 feet to the square, with an 18-foot cupola.

The Altamont Lumber & Grain Co. has incorporated at Altamont, Ill.; capital, \$20,000. It will deal in hay, grain, lumber and coal. The incorporators are Edward Lange, Paul A. Munzel, Charles W. Klitzing, H. Schwardtfeger and J. E. Rhodes.

The John S. Metcalf Co. is constructing an elevator at Champaign, Ill., for the Cleveland Grain Co. to cost about \$75,000. It will have a capacity of 250,000 bushels. The storage tanks now standing will hold 25,000 bushels each. An important feature of the new elevator will be the installation of two

2,000-bushel capacity scales. The cleaners, dryers and clippers are the best obtainable. A new Corliss engine will furnish 250 horsepower.

The G. C. Cutten Grain Co. has incorporated at Decatur, Ill., with a capital of \$25,000. The incorporators are G. C. Cutten, C. P. Cline and F. L. Evans.

The Atkinson Farmers' Grain Co. of Atkinson, Ill., will erect a 40,000-bushel elevator. The building is in charge of the Burrell Construction Co. of Chicago. It will be equipped with sheller, cleaner, automatic scale, man lift and every modern device for handling grain efficiently. A corn crib of 10,000 bushels' capacity will be attached to the elevator.

IOWA.

A farmers' elevator has been opened at Carrville, Iowa.

J. K. Hartman is rebuilding his grain house at Clearfield, Iowa.

A new engine has been installed in the elevator at Gilbert, Iowa.

The elevator at Hamburg, Iowa, is having an addition built to it.

The new elevator at Beaman, Iowa, will be ready for the new crop.

The farmers' elevator at Malcom, Iowa, is rapidly nearing completion.

Jas. Hylton is planning the erection of an elevator at Lorimor, Iowa.

Fred Culbertson has sold his elevator at Carroll, Iowa, to J. B. Maricle.

The Farmers' Elevator Co. is building a new elevator at Malvern, Iowa.

The Updike Grain Co. is having the elevator at Audubon, Iowa, repaired.

A Farmers' Co-operative Grain Co. has been organized at McNally, Iowa.

J. J. Mathews is remodeling and repairing his elevator at Cherokee, Iowa.

Thompto & Heiny have purchased the Guidinger Elevator at Northwood, Iowa.

The Farmers' Elevator Co. at George, Iowa, has installed a new wagon dump.

T. K. Moore & Son have traded their elevator at Cedar, Iowa, for a farm in Missouri.

Larson Bros. are arranging for the construction of a new elevator at McCallsburg, Iowa.

The new farmers' elevator at Hinton, Iowa, will be completed the latter part of August.

The Farmers' Elevator Co. of Williams, Iowa, is contemplating building a new elevator.

The Farmers' Elevator Co. of Bagley, Iowa, are contemplating building a new elevator.

A. S. Mawhinney has purchased the grain business of J. A. Woodle at Northboro, Iowa.

A. H. Nafus & Sons have purchased the Western Elevator Co.'s buildings at Nashua, Iowa.

Articles of incorporation were adopted by the Farmers' Elevator Co. at Dinsdale, Iowa.

The Rockwell City Elevator Co. of Rockwell City, Iowa, has purchased the Western elevator.

The Hunting Elevator Co. is making some improvements on its building at Chester, Iowa.

The Farmers' Elevator Co. has purchased the T. Harris & Co.'s elevator at Barnes City, Iowa.

Sprague & Wrigley expect to install a new sheller in their elevator at Columbus Junction, Iowa.

The Garwin Farmers' Elevator Co. has purchased the Wells-Hord Grain Co.'s plant at Garwin, Iowa.

E. A. Bowles has sold his elevator and grain business at Wellsburg, Iowa, to Enno Peters for \$7,000.

The Farmers' Elevator Co. has been making extensive improvements on its property at Ventura, Iowa.

Work is progressing on the new elevator at Lacona, Iowa, to replace the one destroyed by fire last winter.

The Farmers' Elevator Co., of Holstein, Iowa, is equipping its elevator with a Hall Signaling Grain Distributor.

Asa Bailey has torn down the elevator recently purchased at Clearfield, Iowa, and is moving it to Diagonal, Iowa.

The Richards Elevator at Center, Iowa, is being remodeled for the installation of a new engine and new grain buckets.

It is reported that the Updike Grain Co. of Omaha will put up an elevator at Rolfe, Iowa, with a 200,000 bushels' capacity.

The Quaker Oats Co. of Cedar Rapids has purchased the Wells-Hord Grain Co.'s elevator, located at Grand Mound, Iowa.

At a recent meeting of the stockholders of the Farmers' Exchange at Lake Park, Iowa, it was decided to tear down the company's old elevator and

to erect a new one. The contract was let to a Sioux City man.

The elevator at Gruver, Iowa, has been torn down and a larger elevator is in the process of building.

The Farmers' Co-operative Elevator Society will build a new house on the site of the old Western Elevator at Dumont, Iowa.

The Farmers' Grain Co. is building a new brick engine house at Oakville, Iowa. A new Fairbanks-Morse Engine will be installed.

The Farmers' Grain and Coal Co. at Pocahontas, Iowa, is building an annex to its elevator, the new structure being larger than the old building.

The S. E. Squires Grain Co. of Bondurant, Iowa, has purchased the grain elevator at Kelley, Iowa, of J. M. Johnson, who will continue as manager.

E. W. Miller & Co. are wrecking their old elevators at Casey, Iowa, preparatory to the construction of a single modern structure on the old site.

The Sidney Elevator Co., Sidney, Iowa, is making improvements in the way of a concrete foundation for the scale and cement floors for the building.

The elevator property in Bouton, Iowa, has been purchased by a newly organized company called the Farmers' Elevator Co. of Bouton, capitalized at \$15,000. Extensive improvements will be made on the property in the near future.

The Farmers' Elevator Co. has been incorporated at Marcus, Iowa, the capital stock to be not less than \$5,000 at the beginning and increased, but not to exceed \$25,000. The officers elected were: President, J. Q. Arnold; secretary, C. V. Peters.

Turner Bros., owners and operators of numerous elevators in southwestern Iowa and northwestern Missouri, are erecting an elevator at College Springs, Iowa. The storage capacity is 10,000 bushels, but 30,000 bushels of grain can be handled daily, if necessary.

MINNESOTA AND WISCONSIN.

Isaac Brault is building an elevator at Coleman, Wis.

C. L. Todd has built an elevator at Pemberton, Minn.

The Duluth Elevator has been repaired at Chokio, Minn.

John Haas is building an elevator at Cuba, near Farris, Minn.

A new elevator will be erected at Aitkin, Minn., on the Soo tracks.

The Northwestern Elevator Co. has repaired its elevator at Holland, Minn.

The Farmers' Warehouse Co. at Nelson, Minn., is constructing a new elevator.

The Farmers' & Merchants' Supply Co. will build an elevator at Minneota, Minn.

A. Grams & Son are building a warehouse and grain elevator at Onalaska, Wis.

The Farmers' Elevator Co. will enlarge the capacity of the elevator at Hawley, Minn.

It is reported that a new elevator will be built at Easton, Minn., by the Bennett Grain Co.

The Peavey Elevator at Spicer, Minn., has been repaired and an engine house has been built.

The farmers around Warroad, Minn., have been considering the building of a Farmers' Elevator.

The old Atlantic Elevator at Buffalo, Minn., has been pulled down and moved to a North Dakota site.

The Farmers' Elevator Co. at Comfrey, Minn., has bought Bingham Bros.' elevator at the same place.

The Farmers' Elevator Co. has purchased G. T. Harris's elevator at Hartland, Minn., and will remodel it.

The Farmers' Elevator Co. at Waverly, Minn., will remodel and enlarge their elevator at a cost of \$1,000.

The Meeker County Farmers' Milling Association will build an elevator at Litchfield, Minn., during the summer.

The Farmers' Elevator Co. of Canton, Minn., will receive bids for the rental of the elevator not later than July 20, 1912.

M. J. Bungarden and Dan Donovan of New Richmond, Minn., have purchased the Sorenson elevator at Albert Lea, Minn.

The Alma Farmers' Elevator Co. has been organized at Alma, Minn., by H. H. Moen, B. M. Bothun, F. Folland and others.

The Schmidt & Anderson Grain Co. of Springfield, Minn., has sold its elevator at Comfrey, Minn., to the Springfield Milling Co.

Storage capacity for 300,000 bushels of grain will be added to the plant of the Banner Grain Co. at Minneapolis, by the erection of six steel grain tanks, each tank to be 60 feet high. The Minneapolis Steel

and Machinery Co. has the contract and the work is progressing.

Dunn Brothers have purchased the G. C. Bundy elevator at Luverne, Minn. It has been overhauled and put in first-class condition.

The Farmers' Grain & Stock Co., of Kasson, Minn., has purchased the Western Elevator. C. M. Beeman has been selected as manager.

Chas. Sage and James Fifield, who purchased the Cooper & Hughes Mercantile Co.'s elevator at Delavan, Wis., will take possession Aug. 1.

The Farmers' Elevator Co. that purchased the business and equipment of the Geo. Thompson Fuel Co. took possession July 1, at Faribault, Minn.

The Northwestern Lumber & Wrecking Co. is wrecking the famous old 1,000,000-bushel elevator "B" to make room for additional trackage for the C., M. & St. P. R. R. at Minneapolis.

The Merchants' Elevator Company of Minneapolis is constructing six reinforced concrete grain tanks, 82 feet high. They are being built by L. O. Hickok & Son, and will cost \$17,000.

Kurth Co. of Milwaukee, Wis., has placed the contract with the Burrell Engineering & Construction Co. for concrete storage tanks of 150,000 bushels' capacity. Work was commenced on July 15th.

The Great Northern R. R. has awarded the contract for the construction of a belt conveyor connecting Elevator S, the handling house of the company's grain elevator system, at Superior, Wis., and Elevator X, one of the storage houses, to the Schmidt Bros. Co. The cost will be \$30,000.

EASTERN.

Fred Jones of Bristol, N. H., will engage in the grain business.

R. H. Morrill has disposed of his grain business at Buckfield, Me. Frederic A. Taylor, the buyer, will soon take possession.

A grain elevator, with capacity of 10,000 bushels, will be constructed at Clayton, Mass. It will cost from \$7,500 to \$10,000.

The Clover Leaf Milling Co., located at Buffalo, will add to its plant an elevator with a capacity of at least 150,000 bushels.

The new elevator of the J. B. Cover Co. of Lowell, Mass., has been completed. The building is three stories high, and 83x50 feet.

L. H. Tuttle has sold his grain business at Eastport, N. Y., to the Brooklyn Elevator Co. J. D. Bell, the present manager, will continue to run the business.

WESTERN.

New machinery has been installed in the elevator at Mildred, Mont.

Thomas Lyons is building a grain warehouse at Gilliam, Wash.

The Occident Elevator Co. will build an elevator at Park City, Mont.

A 30,000 bushel elevator is being constructed at East Havre, Mont., for Earl Clark.

The grain elevator at Picabo, Idaho, is practically completed. Its capacity is 50,000 bushels.

The Union Grain Co. of Creston, Mont., voted to increase its capital stock from \$5,000 to \$12,000. They also decided to build an annex 40x100 feet to the present warehouse, giving it 16,000 feet of floor space.

The Puget Sound Warehouse Co. is building additions to its warehouses at Dry Creek and Tracy, Wash.

The farmers around Winona, Wash., have been considering the building of a warehouse to handle the 1912 crop.

Articles of incorporation of the Leitch Warehouse & Grain Co. have been filed at Tacoma, Wash. The capital stock is \$20,000.

The Montana Elevator Co. held a meeting in Lewiston, Mont., to consider the proposition of increasing the capital stock from \$50,000 to \$200,000.

The White-Dulany Co. has purchased for \$75,000 two lots adjoining the Fisher Flouring Mills property in Seattle, on which it proposes to build a dock and warehouses.

The Dennis Elevator & Transportation Co. of Dennis, Mont., is considering the purchase of an elevator at Nibaux, Mont., to be run in connection with the Dennis house.

The Antelope Grain Co. has incorporated at Antelope, Mont., with a capital stock of \$10,000. The incorporators are John Grayson, R. R. Neland, W. W. Clark and Richard Grayson.

The Farmers' Grain Co. of Malden, Wash., is building an addition, 75x60 feet, to its large warehouse. It expects to handle 250,000 bushels if the crop fulfills present prospects this year.

The Western Lumber & Grain Co., operating elevators at Lewistown, Glengary, Moore and Garneill, Mont., has changed hands and is now owned by Fergus County men. The new officers are: Geo. M. Stone, president, and W. J. Johnson, secretary-

treasurer. The company has disposed of its lumber interests and will confine its operations to the elevator business. It has been announced that a new elevator will be built at the new town of Hilger, Mont., by this company.

A farmers' elevator company was organized and stock subscribed for a 40,000-bushel elevator at Drummond, Mont. In addition to this plant, it is proposed to build elevators at Hall and Phillipsburg, Mont.

The Flathead Valley Farmers' Elevator Co. of Polson, Mont., has incorporated with a capital stock of \$40,000. D. E. Blair, G. W. McAlear, John Sherman, B. F. Kashner and F. L. Gray are the incorporators.

Eight new elevators are in course of construction throughout Montana, all under the direction of the Russell-Miller Milling Co. of Billings. They are located at Clyde Park, Wilsall, Comanche, Broadview, Laurel, Park City, Hardin and Billings.

The Eastern Montana Elevator Co. of Glendive, Mont., has let a contract to Hickok & Son of Minneapolis for the erection of three new grain elevators at Fallon, Intake and Stipek, Mont. With the three additional ones, this company will have a string of six elevators.

THE DAKOTAS.

The elevator at Kathryn, N. D., has been repaired.

A farmers' elevator will be erected at Carson, N. D.

A new elevator is being constructed at Geddes, S. D.

The Royal Elevator at Kenmare, N. D., has been razed.

The new elevator at Canistota, S. D., is practically finished.

The new elevator at Hope, N. D., is practically finished.

The new elevator at Twin Brooks, S. D., is about finished.

Doane & Sears are constructing an elevator at Winner, S. D.

A farmers' elevator company may be organized at Stanton, N. D.

The Farmers' Elevator Co. has incorporated at Munich, N. D.

An addition has been made to the elevator at Grandin, N. D.

A Farmers' Elevator Co. is being organized at Rockham, S. D.

A farmers' elevator company has been organized at Frankfort, S. D.

The Jessie Farmers' Elevator Co. of Jessie, N. D., will soon rebuild.

The Bagley Elevator Co. will build a 30,000-bushel elevator at Faith, S. D.

L. Buege, Canistota, S. D., purchased a Hall Signaling Grain Distributor.

G. H. Birchard, Winner, S. D., has purchased a Hall Special Elevator Leg.

Mark Wertz has purchased A. W. Carlisle's elevator at Woonsocket, S. D.

McCabe Bros.' elevators have been enlarged and remodeled at Cavalier, N. D.

The Empire Elevator at Wilmot, S. D., destroyed by fire some time ago, is being rebuilt.

Work on a new elevator for the Farmers' Elevator Co. will soon begin at Pillsbury, N. D.

Subscriptions for stock in a farmers' elevator to be erected near Bancroft, S. D., are being solicited.

The Farmers' Elevator Co. has let the contract for a 35,000-bushel elevator to be built at Eckelson, N. D.

The Atlas Elevator Co. has torn down the elevator at Hecla, S. D., preparatory to building a new one.

The old Bagley Elevator at Strandburg, S. D., has been torn down and a new one is being constructed.

Representatives of several elevator companies are considering the erection of an elevator at Jamestown, N. D.

The Farmers' Equity Elevator Co. plan to build an elevator at Makoti, N. D., this fall, if the crop warrants it.

The Equity Society is planning to organize several co-operative elevators in the western part of North Dakota.

The Eldorado Farmers' Elevator Co. has purchased the property and business of the Taft Farmers' Elevator Co., at Taft, N. D.

The Farmers' Grain Co. has purchased the Broderick, McDeermott Elevator at Kramer, N. D., for \$4,700. It will be moved four and a half miles east of Kramer.

The Occident Elevator Co. has made improvements on the elevator at Hazelton, N. D. A 10 horse-power engine has been installed and a new

elevator leg, giving the elevator a capacity for handling 2,000 bushels of grain an hour.

A meeting was held July 3d, at Williston, N. D., for the purpose of organizing a co-operative elevator company.

Representatives of three elevator companies have been looking over crop conditions at Pettibone, N. D., with a view to erecting elevators.

A syndicate of farmers in Pierce County, N. D., will erect two new elevators on the new Soo extension in the southern part of the county.

Instead of building a new elevator at Coburn, N. D., the Farmers' Grain Association has purchased the Monarch Elevator and will overhaul it.

The Farmers' Elevator Co. of Erie, N. D., has incorporated with a capital stock of \$15,000. The incorporators are C. F. Meyers, Louis Schroeder and Jacob Lehman.

John F. Davis Elevator Co. has incorporated at Dickinson, N. D., with a capital stock of \$25,000. The incorporators are John F. Davis, Ray E. Henderson and H. F. Beidler.

The Equity Elevator Co. of Brantford, N. D., has incorporated and capitalized at \$20,000. The incorporators are B. W. Hersey, Tiffany, N. D.; A. J. Richter, New Rockford, N. D.; and P. T. Anderson, Brantford, N. D.

OHIO, INDIANA AND MICHIGAN.

Marcus Brooks has purchased the elevator at Devils Lake, Mich.

The new elevator has been moved to Leipsic, Ohio, from Belmore, Ohio.

The Chalmers Grain Co. is building an addition to its elevator at Chalmers, Ind.

Hart Brothers, Saginaw, Mich., have purchased a Hall Signaling Grain Distributor.

Perrot & Stewart, Chesaning, Mich., have bought two Hall Signaling Grain Distributors.

Morris Kent & Co. of Kalamazoo, Mich., has increased its capital from \$10,000 to \$100,000.

Thomas Read, Pinckney, Mich., will install two Hall Signaling Grain Distributors in his elevator.

The new Egly-Doan Elevator was opened to public inspection the latter part of June, at Fort Wayne, Ind.

The Sheets Bros. Elevator Co. has increased its capital stock from \$50,000 to \$200,000 at Cleveland, Ohio.

The Haskins Farmers' Grain Co. has been incorporated at Haskins, Ohio, with a capital stock of \$15,000.

Sims & Ashpaugh of Frankfort, Ind., have purchased the Simon J. Carroll elevator at Royal Center, Ind.

The Sunfield Elevator Co., Sunfield, Mich., will equip its elevator with a Hall Signaling Grain Distributor.

Charles Wollohan has installed two Hall Signaling Grain Distributors in his elevator at Birch Run, Mich.

Mercer & Morris are building an elevator at Kenard, Ind. W. J. Mercer was formerly solicitor for H. E. Kinney.

Chapin & Co. has incorporated at Hammond, Ind., with a capital of \$150,000, to operate grain elevators and flour mills.

Goodrich Bros. Hay & Grain Co. of Winchester, Ind., has issued \$100,000 preferred stock, and \$25,000 common stock.

The Lyons Construction Co. of Indianapolis, Ind., is remodeling the grain elevator at London, Ohio, for Rea Chenoweth.

The McConnell Grain Co. has incorporated at Lima, Ohio, with a capital of \$10,000. C. K. Fauver and others are the incorporators.

The Lipe Elevator at Bryan, Ohio, is undergoing improvements and additions that will enable it to handle 150 cars of grain per day.

The Crabbs, Reynolds, Taylor Co. is rapidly completing its new elevator at Wingate, Ind. The building is considered absolutely fireproof.

A. E. Huston and S. B. Swope, proprietors of the elevator at Amanda, Ohio, have purchased the Shaeffer Elevator at Carroll, Ohio, for \$3,000.

A farmers' grain elevator will be established at Darlington, Ind., with a capital of \$12,000. Elmer Pickerell has been made president of the organization.

The Thornton Grain Co. has been incorporated at Thornton, Ind., with a capital stock of \$20,000. The company will either build or buy one or two local elevators.

The Union Elevator Co. has incorporated at New Richmond, Ind., and capitalized at \$20,000. The directors are Charles and Henrietta Haywood and J. Detchon.

Cottrell & Cottrell, grain and hay dealers in Terre Haute, who operate several establishments in the western part of the state, have filed a petition with the railroad commission that the Chicago, Terre

Haute & Southeastern Ry. be ordered to construct a siding at Westbrook crossing, about 20 miles from Terre Haute.

Plans are under way to erect a 50,000-bushel elevator on property adjoining the grain and hay warehouse near Ironville, Ohio. The new elevator will cost about \$30,000.

The Farmers' Elevator Co. of Mt. Vernon, Ind., has incorporated and capitalized at \$15,000. The directors are Absalom W. Mackey, Lawrence Wilson and Armenius Templeton.

The Miller & Neal Co. of Warren, Ohio, has been incorporated with a capital stock of \$30,000. D. E. Miller, F. B. Neal, R. H. Pinkerton and Warren Thomas are the incorporators.

The Spencer-Furrow Co. has organized at Piqua, Ohio, to operate elevators at Piqua, Fletcher and Farrington. The company is capitalized at \$60,000. O. F. Furrow is president and Rex Furrow is secretary.

The Jordan & Montgomery Elevator at Indianapolis will have an increased capacity of 100,000 bushels through its recent improvements. A drier will be installed and all will be complete for the oats crop.

The recently organized Jewell Grain Co., at Jewell, Ohio, is spending over \$3,000 in the enlargement and remodeling of its elevator plant. The company expects to handle 100,000 bushels of grain during this harvest.

The partnership doing business at Canal Winchester, Ohio, under the firm name of O. P. Chaney's Sons has been dissolved by the death of Walter B. Chaney. The place of business known as the Chaney Elevator has been transferred to Daniel F. Taylor.

The Northwestern Elevator and Milling Co. is erecting a new office building of pressed brick in connection with its plant at Mt. Vernon, Ohio. The present office building will be retained and, later, it may be raised several stories to correspond with the mill building.

The Saginaw Milling Co., of Saginaw, Mich., has placed a contract with the Burrell Engineering & Construction Co. for a 200,000-bushel grain and bean terminal elevator. It will be of reinforced concrete construction with a warehouse and large bean picking room in connection.

The Farmers' Elevator Co. of Whiteville, Ohio, has placed a contract with the Burrell Engineering & Construction Co. for a 20,000-bushel grain elevator. It will be of crib construction and include in the equipment a Sidney Sheller and Cleaner and a 50-horsepower Fairbanks-Morse Oil Engine.

Goodrich Bros. of Winchester, Ind., are building 35,000-bushel additional storage. A 120-horsepower additional electric motor will be added and a 4,000 bushel Ellis Drier built. The construction will be concrete. A brick flour warehouse 30x42 feet, two stories in height, will also be built. The contract for all the work was placed with the Burrell Engineering & Construction Co.

SOUTHERN AND SOUTHWESTERN.

The Wood-Crabbe Grain Co. of Birmingham, Ala., will erect a brick building.

The Farmers' Elevator Co. will rebuild its burned grain elevator at Hydro, Okla.

The Reinhardt Grain Co. will erect an iron clad warehouse, 30x60 feet, at Barstow, Texas.

A building permit has been issued to W. J. Boaz to erect an elevator at Fort Worth, Texas.

The Dazey-Moore Grain Co. of Fort Worth, Texas, has increased its capital stock from \$25,000 to \$50,000.

The Terminal Grain Co. has received a permit to erect an addition to its plant at Fort Worth, Texas, costing \$5,000.

H. H. Tift and I. W. Meyers, members of the Chamber of Commerce, are interested in the erection of a corn elevator at Tifton, Ga.

The Star Hay & Grain Co. of Albuquerque, N. M., has dissolved partnership, J. W. Palmer retiring. S. H. Seth will continue the business.

J. R. Hale & Sons of Nashville, have leased the Pembroke Warehouse at Pembroke, Ky., and will operate during the present wheat season.

The Bogalusa Grain Co. has incorporated at Bogalusa, La., with a capital of \$15,000. E. L. Sibley is president, and S. W. Sibley Jr. is secretary.

The Ramage Brokerage and Commission Co. has incorporated and capitalized at \$25,000 in Texarkana, Ark. The incorporators are W. R. Ramage, F. W. Mullins, T. S. Mullins, and others.

The American Grain & Seed Co. has been incorporated at McAlester, Okla., with a capital stock of \$10,000. The incorporators are P. C. Tarver, George M. Swift, J. B. Foster and F. M. Foster.

Several new elevators have been erected in the Panhandle district of Texas. One at Shamrock has a capacity of 50,000 bushels, and McLean is consid-

ering the construction of one with a capacity of 50,000 bushels.

The Planters' M'n'g. Co. contemplates the establishment of an elevator at Clarkdale, Miss.

MISSOURI, KANSAS AND NEBRASKA.

H. R. Melendy will erect a grain elevator at Morrell, Kan.

The elevator at Neosho Rapids, Kan., has been completed.

An elevator store room has been erected at Rockport, Mo., by John M. Horton.

W. H. Cramer, Goehner, Neb., recently purchased a Hall Signaling Grain Distributor.

J. M. Wine & Co. will install a Hall Grain Distributor in their elevator at Clarence, Mo.

The Dodge Milling & Elevator Co., Dodge City, Kan., will install a Hall Special Leg in their elevator.

An elevator will be erected at Joy, a new station near Greenburg, Kan., by Henry Wacker and E. R. Smith.

The Macksville Lumber & Grain Co., Belpre, Kan., will equip their elevator with a Hall Special Elevator Leg.

The Anchor Grain Co., composed of S. B. McClaren and C. E. R. Winthrop, has been established at Wichita, Kan.

The Ingle Bros.' Broom, Corn and Grain Supply Co. has been incorporated at Kansas City, and capitalized at \$50,000. The incorporators are Clyde Ingle, Clifford B. Ingle and Morris Ingle.

The Stevenson-McCaffery Co., composed of J. F. Stevenson and T. F. McCaffery, has incorporated at Omaha, Neb., to conduct a wholesale and retail grain and fuel business. It is capitalized at \$10,000.

CANADIAN.

The McBride Elevator Co. has placed a building at Khedive, Sask.

The Canadian Government has purchased 47 acres of lake front and will construct a 3,000,000-bushel capacity elevator, at Fort William, Ont.

The residents of Victoria, B. C., have been seeking to interest the government in a plan to establish a grain elevator at Victoria. Nothing definite has resulted.

The C. P. R. promises a fine elevator service for wheat handling at Vancouver, B. C., by October, 1914. The Pacific Terminal Elevators will be complete by that time for the opening of the Panama Canal.

The Turner Elevator Co., Ltd., has been incorporated at Winnipeg, and capitalized at \$150,000. J. A. Turner, H. P. Grundy, A. E. Hoskin, H. R. Drummond-Hay and Marshall Anderson are the incorporators.

The new No. Two grain elevator, owned by the Harbor Commissioners, at Montreal, is nearly completed. The great structure will have a capacity of 2,600,000 bushels. The elevator is 456 feet long and 100 feet wide, the receiving elevator being 314 feet long, and the extension 142 feet.

[Special Correspondence.]

TOLEDO AND OHIO STATE NEWS.

BY E. F. BAKER.

Toledo has never experienced such a scarcity of soft winter wheat as is anticipated this season. Toledo's big mills generally can count on more than enough wheat for their requirements from Ohio, Indiana, Michigan and Illinois, but owing to the failure of the wheat crop in this section this season it has been found necessary to go elsewhere for grain. Chief Inspector Culver has just returned from a trip through the Southwest, where he was sent by the Produce Exchange to get a line on wheat supplies of good quality. It is thought that it will be difficult to offset the shortage at home regardless of how much grain can be drawn west of the Mississippi and other points not usually looked to for grain supplies. The wheat grown west of the Mississippi does not equal in quality that grown east of the big river. Oklahoma wheat is hard and rather dark in color; Missouri wheat contains too much garlic, and there is also an excess of garlic in wheat grown in Maryland and other Eastern states where local millers will probably have to buy heavily. The soft winter wheat of the Coast is badly mixed with smut. David Anderson, of the National Milling Co., in a recently published interview on the subject, said: "There will be a little winter wheat raised in Ohio, Indiana, and Illinois and Michigan will produce proportionately more than these other states. We must not forget there are 4,000,000 bushels or so of soft winter wheat in Chicago, that will come in handy. This garlic matter, however, is serious. We got 50,000 bushels from our Noblesville mills from Missouri some time ago and although there was absolutely no trace of garlic in the wheat, the flour fairly reeked with it. There is no way garlic can be entirely gotten

out of wheat, and it is a fact that some South American countries will have no other."

Considerable wheat has been received in Toledo during the past week, large shipments coming in from Chicago. Quite a bit of wheat has also been shipped out of Toledo to interior mills which are clamoring for more than is available. During the week there was received in Toledo 131,000 bushels of wheat, while the shipments aggregated 65,000 bushels. What wheat was saved by farmers is looking good and the recent rains have been a god-send to crops all along the line. Oats are a splendid crop this season and corn is looking fine throughout this section.

Considerable corn has been finding its way into the local markets, receipts during the last week amounting to 31,700 bushels. This is of fine quality, nearly all grading contract. It is the special hand picked corn saved by farmers for just this purpose and holders are beginning to let go so that space will be provided for the new crop. Prices are fairly strong, the Toledo market closing today, July 10, with corn quotations as follows: Cash corn, 75c; July 74½c, Sept. 71½c, Dec. 60¾c. Corn shipments have been liberal this week also, 17,600 bushels having been sent out of Toledo.

Oats receipts for the week were 16,500 bus. and shipments amounted to 22,700 bushels. Cash wheat was quoted at the closing of the Exchange today \$1.08¾ and oats 49½. Corn qualities have been exceptional, 90% of the receipts grading contract. Of 49 cars received 28 graded No. 3, 12 No. 4 and 9 sample.

Taken altogether the market here is in splendid shape outside of the wheat situation. There has been a good crop of hay and the quality is said to be fully up to standard. Many fields have been cut already.

Harry Enright, who has been employed in the office of Chief Grain Inspector Culver, has accepted the position of assistant grain inspector.

An effort is being made in Toledo by railroad companies to improve their tracer service. It is claimed by the railroad officials that there seems to be a general tendency on the part of Toledo shippers to send out tracers unnecessarily, which clogs the wheels of the department and makes effective service impossible. It is a general custom, it is stated, for Toledoans to start out tracers simultaneously with the shipment and frequently necessary tracers are lost and submerged in the great quantity of useless ones sent out. Shippers will also be requested to make early deliveries. While the rule is to receive no freight after 5 o'clock, it has been the custom with many shippers to deliver to the freight houses long after that hour. A better service is hoped for out of the co-operation between shippers and transportation companies.

News comes from Bellefontaine, O., of the organization of the Champaign-Logan County Agricultural Society with the following officers elected: Pres. H. H. Carr, Secretary Clyde Hooley, Treasurer D. H. Yoder.

Work will begin here about September 1 on a 50,000-bushel elevator to be erected in East Toledo by the Charles Rockwell Co., of Mt. Vernon, N. Y. The new elevator will be for the private use of the company and will be situated near the company's hay warehouse at Front and Treadwell Streets, in Ironville, near the Toledo Terminal. The warehouse will be constructed of concrete and will cost nearly \$50,000.

Early harvest work in a Sandusky County hay field was abruptly stopped recently when a temporary restraining order was granted by Judge Garver at Fremont, O. The case was filed by John Steager and Conrad Steager as administrators of the estate of Charles Steager, deceased, against Herman and Henry Liedke. The defendants entered the field and begun cutting grass last Tuesday. Plaintiffs claim that defendants had no right to proceed in this matter and allege that the hay is too green to cut and will depreciate in value if cut. The case will be fought out in Fremont courts.

Chief Inspector E. H. Culver has been scouting in the Southwest for the Toledo Produce Exchange for soft winter wheat and reports that Eastern millers are eager buyers of the new grain. "They are making all sorts of propositions," said he. "There are track walkers who go into the country and figure on the farmer's crops and then advance them \$50 or \$75, which makes a guarantee of delivery of the crops. It is a condition I have never seen before." Chief Culver reported from Kansas City the last of June that the early shipments of grain showed light weight. This, however, is practically a normal condition and is generally true of the first cars of a new crop movement.

Ed Bates of the F. W. Whitker concern at Bowling Green, a recent visitor at the Toledo Produce Exchange, reports a hopeful outlook for corn and oats in that vicinity. Some hay has been cut. Timothy is a little short, but we will have a good crop. Some clover has been cut and the yield seems satisfactory, though acreage is light.

Grain dealers and railroad representatives at a recent meeting at the Produce Exchange hit on a plan to prevent car leakages of grain. It was decided to keep a skilled cooper at each elevator in

the city to see that car doors are securely fastened and take any other action necessary to prevent waste.

John A. Smith, of S. W. Flower & Co., and Fred Jaeger, of the J. F. Zahm Co., attended the meeting of the American Seed Trade at Chicago the last of June.

W. E. Cratz has returned from a trip through the western half of New York state. He found nearly all crops in better condition than usual and predicts a much larger hay crop than was had a year ago.

The Jewell Grain Co. has purchased the Jewell, O., grain elevator from J. S. Calkins. The plant will be improved and enlarged, about \$3,000 being spent in this manner. The elevator it is expected will be able to handle 100,000 bushels of grain during the coming harvest. Arrangements have been made for a track extension from the Wabash railroad to supply the increased demand for cars.

W. E. Tompkins, of the Raymond Lipe Co., reports hay prospects generally good with the exception of Ohio, Indiana and Illinois, Michigan and New York, the biggest hay producers, will have good yields.

E. W. V. Kuehn, of the Produce Exchange, will sail for Europe on July 17 from New York with Pastor Charles Russell who has planned a series of religious lectures in the British Isles, Germany and France. Mr. Kuehn was a prominent member of the party that traveled round the world last year with Pastor Russell investigating foreign missions.

Ninety-seven timothy meadows totaling 1,164 acres with an average yield of 1,640 pounds per acre, are registered from rural mail route No. 1, north of Marysville, O. Similar size blocks in the same vicinity show similar figures.

An interesting experiment was recently conducted by a representative of the Department of Entomology of the Experiment Station at Wooster, near Upper Sandusky, O., where grass hoppers are rapidly destroying hay and grain fields. The efficacy of the "Hopperdozer," a simple machine for wiping out the pests, was tested. The hopperdozer is constructed from about 60 feet of rough lumber and five yards of oil cloth four feet wide. The machine is pulled through the field by means of a horse hitched to one end and the insects on being frightened by the approach of the machine spring into the air and fall back into a trough containing kerosene and water. Once submerged in the liquid, death results. In six hours a barrel and a half of hoppers were collected with this machine and fully one-third as many crawled up the sides and dropped on the ground, where they expired a few minutes later.

Waterworks Superintendent Ross Barrett, of Tiffin, O., recently caused the arrest of Frank E. Near, superintendent, and Phil Myers, chief engineer of the Harter Milling Co., in that city, charging them with taking city water for use at the mill. The men pleaded not guilty. The claim is made that the water was taken by means of a by-pass, installed years ago, but which has been known to the present officials only since February. Following a fire at the plant fourteen years ago, the city, as an inducement to the company to rebuild, gave them the privilege of using such water as was needed for a sum of \$150 a year for ten years. The by-pass was not removed at the expiration of the ten years, so that it would be there for use in case of an emergency. President A. Mennel, of Toledo, did not admit that the mill had been using water for which it had not paid, but suggested a settlement by arbitration. This failed and the suit followed.

Toledo, July 10.

The annual outing of the Philadelphia Commerce Exchange took place on June 21. The hay men won the baseball game.

The Idaho State Grain and Warehouse Commission met at Coeur d'Alene in June to fix the annual grain standards of Idaho grain.

The Kansas City Board of Trade has appointed a committee consisting of Geo. A. Aylesworth, W. C. Goffe, and D. F. Piazzek to prepare plans for the organization of an inspection department to take care of grain coming from Kansas exclusively. It is said that W. J. Graham, former chief inspector of Kansas, may be appointed an inspector under the Board's jurisdiction.

The board of directors of the Milwaukee Chamber of Commerce has fixed the rate for the weighing of grain from railroad cars upon Chamber of Commerce wagon scales at 80 cents a carload, consisting of ten wagon loads or less. When in excess of ten wagon loads a charge of 5 cents for each additional wagon load is made. Grain and malt, 10 cents per wagon load. The former charge was 50 cents per car of ten wagon loads or less and an additional charge of 5 cents for each wagon load in excess of that number, and grain and malt from other sources than railroad cars in quantities of ten wagon loads or more 5 cents per load, and in quantities of less than ten wagon loads 10 cents per load.

THE EXCHANGES

The Vancouver Grain Exchange has been organized with J. E. Hall as president.

A Chicago Board of Trade membership sold on June 27 at \$2,400, an advance of \$100.

A membership in the Minneapolis Chamber of Commerce was sold on June 12 for \$3,900.

The members of the Cincinnati Chamber of Commerce have been asked by the Grain and Hay Exchange to organize a freight bureau.

The Harris Trust and Savings Bank has been made a depository for board of trade margins by action of the Chicago Board of Trade directors.

The Chicago Board of Trade call committee has added No. 2 red and No. 2 hard wheat, shipment July 15, to the list of grains on which bids are sent out daily.

An injunction has been issued to restrain the members of the Winnipeg Grain Exchange from expelling the plaintiff, H. S. Paterson, as a member, on the ground that he had infringed the rules relating to trading.

The Wichita Board of Trade, in view of the chaos in the Kansas inspection department, has undertaken to organize a local inspection for grain arriving in that market.

The Minneapolis Chamber of Commerce has adopted the proposition of buying in all floating memberships, such as when memberships lapse by death, etc. An assessment of \$30 per year is levied to create a fund for the purpose.

H. Bueren of Muenster, Germany, en route East, where he will visit the seaboard grain exchanges, visited Chicago on June 26. Herr Bueren came from Winnipeg and will visit all of the exchanges in North America before returning home.

The Fort William Grain Exchange will erect a building for its purposes, to cost \$500,000, and the major part of that sum has been subscribed. The Exchange is preparing to handle the business as soon as the Grain Commission is prepared to establish Canada's sample market there.

The Pittsburg Grain and Hay Exchange on June 13 elected the following board of managers: H. G. Morgan, J. A. A. Geidel, Samuel Walton, John Dickson, R. E. Austen and W. W. Beatty. The new managers selected the following officers: R. E. Austen, president; Samuel Walton, vice-president; John Dickson, treasurer.

W. N. Eckhardt, chairman of Chicago Board of Trade call committee has made the following announcement: "No deviation has been authorized on 'call' contracts for wheat, rye or oats from the former rulings of the committee. Old or new wheat, rye and oats are deliverable on these transactions of the grades specified in contracts."

Officers and directors of the Wichita Board of Trade were elected on June 11 as follows: W. R. Watson, of the Watson Milling and Elevator Co., president by a unanimous vote; E. W. Jones, of the Independent Grain Co., vice-president; directors, J. A. Woodside, C. R. Howard, J. W. Craig, W. F. McCullough, N. H. Keith and C. A. Baldwin.

The matter of "public elevators" has been a more or less serious problem with the Chicago Board of Trade since the decision in the Lichtstern case, reported a month ago; but on July 10 the directors and the operators of public elevators came to an agreement, so that the amount of regular space now "public" is as great as last year—nominally 18,000,000 bushels.

The following committees of the Buffalo Corn Exchange have been announced: Grain committee, F. A. McClellan, chairman, H. S. Guthrie, G. F. Booth, Edmund Thomas and S. E. Provost; arbitration committee, Dudley M. Irwin, chairman, E. M. Husted, H. F. Shuttleworth; inspection and weighing committee, S. M. Ratcliffe, chairman, L. S. Churchill, T. J. Stofer, A. B. Black and F. E. Ogden.

Following charges of contempt by the board of arbitration, Herman Deutsch, president of the Herman Deutsch Co., grain dealers, was suspended from all privileges of the Milwaukee Chamber of Commerce for thirty days from June 28, at a special meeting of the board of directors. He is said to have ignored a meeting of the arbitration board called to procure data for the adjustment of differences in the settlement of a partnership.

TRADING IN BONDED WHEAT.

A meeting of the New York Produce Exchange was held on July 9 at the call of the grain committee to consider a proposition to "Establish future trading in bonded wheat," about 45 members were present, but when Chairman A. C. Field of the committee called for speakers, no one responded for some time, until J. W. Warren of J. G. Hagemeyer & Co., explained that about six months ago the board of managers received a communication suggesting that the Exchange inaugurate trading in Canadian wheat futures. The board, he ex-

plained, referred the matter to the grain committee with instructions to report back after it had concluded its deliberations.

There were plenty of opponents of the proposal, but, no advocate of it being present, there was nothing to do. A motion was made, however, that a committee be appointed to formulate plans for such trading, and this was agreed to, the chair naming the following committee: Arch. Montgomery, Jr., of Maguire & Jenkins; William J. Brainard, of the Brainard Commission Company; William M. McCord, of Henry D. McCord & Son, Inc.; William Knight, of Knight & McDougal, and Otto Keusch.

FAVORS THE INTEREST RULE.

The Milwaukee Chamber of Commerce has adopted the following resolution:

"Resolved, That any proposition having for its object the withdrawal of the right of the commission merchant and the track buyer at terminal markets to charge interest on sums of money advanced on consignments or purchases of grain up to the date of unloading, or in case of delay in unloading, for a reasonable fixed period following the date of sale in case of consignments, and following the date of arrival at Milwaukee in the case of purchases, is opposed by the Board of Directors of the Chamber of Commerce of the city of Milwaukee, on the ground that it would result in an undue advantage to one interest of the trade at the expense of another; that probably no class of business men at present carries so great a burden of risk and expense for so small a compensation as the grain commission merchant, and further that it does not appear that any sound reason can be advanced why money loaned on grain should not bear an interest charge for the full period of the loan, making due allowance for unreasonable delay in the unloading of the grain."

CHANGES AND EXCHANGE MEMBERSHIPS.

Baltimore.—Sec'y Hessong reports John P. F. Ritz has been elected a member of the Chamber of Commerce and that the certificate of Mr. Thomas Roberts has been transferred.

Chicago.—The following changes in memberships in the Chicago Board of Trade took place in June: New members—George L. Stebbins, Wm. A. Cockrell, Geo. D. Richards, G. J. Guynn, Howard S. Robb, Richard S. Springs. Transferred—Jno. H. Mosher, Edmond C. Travis, W. R. Holligan, Dennis E. Sullivan, A. D. Grant, C. H. Barrett.

Duluth.—Secretary MacDonald reports that in May Hens Sorenson withdrew from membership in the Duluth Board of Trade and that in June O. T. Newhouse and G. G. Bornus, Jr., were admitted and P. B. Watts withdrew.

Kansas City.—Secretary Bigelow reports that in June C. E. Waldron admitted to membership in the Board of Trade on transfer from J. Sidney Smith and J. J. Kraettli on transfer from Wm. Schrenkler.

Milwaukee.—Sec'y Plumb reports the following the changes in membership in the Chamber of Commerce during the month of June, 1912: New members—Loyal Durant, D. E. Sullivan, Fred C. Ebeling, Philipp Jung, Jr. Transferred memberships—H. S. Garvey, Wm. T. Ebeling, deceased, and Philipp Jung, deceased.

Minneapolis.—Sec'y McHugh reports that R. H. Gallaher has been admitted to membership in the Chamber of Commerce.

Omaha.—F. G. Endelman, formerly senior member of the grain firm of Endelman & Stockham at Hastings, Neb., and a member of the Mason-Gregg Grain Co., at Kansas City, has become a member of the Omaha Grain Exchange.

San Francisco.—Sec'y Friedlander of the San Francisco Chamber of Commerce Grain Trade Association reports the following admitted to membership in the Grain Trade Association during the month of June: Lee W. Bleyer, Durham, Butte Co., California; Everett N. Bee, 310 California St., San Francisco; August F. Benzon, 209 California St., San Francisco; M. G. Lewis, 429 Davis St., San Francisco; J. F. Garrette, Woodland, Cal.; J. M. Ratto, 49 Washington St., San Francisco.

St. Louis.—Sec'y Smith reports that the following were admitted to membership in the Merchants' Exchange in June: Edgar H. Evans, Acme-Evans Co., Indianapolis, Ind.; Chas. W. Baum, Security W. H. & E. Co.; Benj. A. Neal, Elmore-Schultz Grain Co.; R. A. Reumeli, Flour Broker, all of St. Louis. The following have disposed of their memberships: L. B. Hirsch, W. A. Thompson, J. P. Brazill and Gus Block.

Wichita.—O. A. Boyle has been admitted to membership on the Wichita Board of Trade by purchase from Wm. Murphy.

H. J. Atwood has been elected a director of the Duluth Board of Trade to succeed E. H. Smith, resigned to remove to Minneapolis.

The St. Louis Merchants' Exchange has by ballot negated a proposition to require a rental for sacks loaned to members or non-members equal to that charged by others not engaged in the grain business.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

LIKES THIS PAPER.

Editor American Elevator and Grain Trade: I would not be without your paper, as it touches on so many subjects that elevator people are interested in. I wish your paper success. Yours truly,
Vaughnsville, O. D. R. RISSER.

REBUILDING ELEVATOR.

Editor American Elevator and Grain Trade: We are at the present time rebuilding our elevator at Twin Brooks, S. D., and will also build elevators this summer at Faith, S. D.; Baker, Mont.; Mildred, Mont.; Plevna, Mont., and Westmore, Mont.

Yours truly,
GEO. C. BAGLEY ELEVATOR CO.
Minneapolis, Minn.

NEW HAY AT NEW ORLEANS.

Editor American Elevator and Grain Trade: We beg to advise the receipt, in this market, of the first car of new timothy of the crop of 1912. It came consigned to us from Drexel, Missouri, and was shipped by C. F. Arnold & Co., Kansas City, Mo.

The car reached here July 6th, via the N. O. & N. E. R. R. The hay reached here in splendid condition and graded No. 1 Timothy, and was sold promptly on arrival.

Yours very truly,
JOS. V. FERGUSON & CO.
New Orleans, La., July 9.

ONLY REGULAR HOUSES AT LEESBURG, Etc.

Editor American Elevator and Grain Trade: This company has recently bought and now owns the elevator at Leesburg, Ohio, formerly operated by R. P. Barrett. We are, therefore, the only regular grain dealers at Leesburg, Monroe, Blanchester, Lynchburg and Trebeins. Anybody else offering grain for shipment from these stations is a scoop-shoveler and should be classed and considered as such.

The above purchase has increased our storage capacity at Leesburg to about 60,000 bushels.

Yours truly,
THE DEWEY BROS. CO.
Blanchester, O.

MR. GOODMAN REPLIES.

Editor American Elevator and Grain Trade: I was much pleased to see one of the abusers of the crop experts come back in last month's issue in rejoinder to my defense of the ancient craft. Mr. W. H. Smith has certainly been on the trail of the experts.

His reply, however, emphasizes my contention that the expert gets blamed for a lot of stuff for which he is not responsible, as evidenced in Mr. Smith's quotations of opinions of sundry people. Of these opinions I have already unburdened myself in the articles appearing in the "American Elevator and Grain Trade," and further elucidated them in my address before the Illinois Grain Dealers' Association last month, a perusal of which I invite Mr. Smith to undertake. I wish to remind him that today Mr. Coburn, who uses such brilliant language to berate the crop reporters, issues a report indicating 77,000,000 bushels of wheat for Kansas this year, which is around the figures the experts gave last May, with one exception, and he an Eastern man, who seemed to indicate a 100,000,000-bushel crop. Mr. Smith will recall that his reactionaries talked anywhere from 90,000,000 to 105,000,000 for Kansas, when they joined hands and danced in mockery about the experts.

Two specific instances are quoted by Mr. Smith as to the reckless character of the experts in making predictions. He repeats the deliberate review of the disastrous condition in North Dakota made by Mr. Inglis in 1910, when having finished his tour of the state he cast up the situation. Mr. Inglis, as quoted by Mr. Smith, said these awful things of the distressed condition: "Never have I seen such widespread devastation in North Dakota. There are streaks of wheat that will make possibly 8 to 10 bushels, but 60 per cent of the area is almost hopeless."

Why should Mr. Smith condemn Inglis without proof. This Inglis delivery was of date June 30. A few days later the Government got out a crop report giving North Dakota a condition of 45. On a ten-year average harvest this condition figured 7.3 bushels for the state. The final report gave North Dakota 5.5 bushels as the average yield per acre. There are many people who tried to raise wheat in North Dakota that year, who say worse things about the Government report being exaggerated than Mr. Smith appears to think of Inglis. The expert was fully confirmed.

The final clinching quotation in the indictment is one from a statement issued by Clement, Curtis

& Co., on May 23, 1910, in which its crop expert—myself—reviews the character of some 32 reports from the Hessian fly center of infection in Illinois, and a condition of 60 per cent for the wheat was deduced, and the assertion made that, "Not over half a crop is indicated in St. Clair, Madison, Randolph and Pike Counties." The State Board of Agriculture of Illinois, to which we must go for data by counties, gives the average yield of the state in that year as 15.4 bushel per acre; the average of the four counties named above was 11.2 bushels. The previous year Illinois averaged 19 bushels per acre. The correspondents of Clement, Curtis & Co. were certainly onto their job early in the year.

Why parade sensational statements, confirmed by subsequent events, as blemishes on the reputation of honorable gentlemen? Mr. Smith and his kind need an inoculation of judicial temperament. I wish I knew how to help them.

Yours truly,
Chicago, July 2, 1912. P. S. GOODMAN.

SOME SCALE PROBLEMS.

Editor American Elevator and Grain Trade: I would like to ask Mr. Clay Johnson, scale expert, through the pages of your journal, what he found was the trouble with the track scale he mentioned in his paper on scale testing at the Illinois Grain Dealers' meeting held at Peoria, and which was reported in your journal of June 15th.

He stated that he found a track scale weighing 35 pounds heavy when the scale was empty, 2,000 pounds being used to make the test, and that this same scale, when tested with a load of 80,000 pounds on it, showed absolutely correct on the ton of test weights. Now, I am quite sure that not only the scale men who read your paper, but also your subscribers, the grain men who own track scales, would like to know what caused such an unusual condition.

Furthermore, that part of his paper relating to the multiplication of scale leverage concerning errors shown on 1,000 pounds of test weights needs some further elucidation. Mr. Johnson says that the error in a scale will not multiply—says "absolutely not," and then follows with a reservation that the multiplication applies only to a scale in error by being out of seal. He does not state how many scales he found out of seal. He furthermore makes the statement that if the scale is properly constructed, in seal, and not dull, 50 pounds would be as fair a test as any. Now, if my conception of the purpose of a test is correct, no 50-pound test weight, no matter how carefully used, and no matter by whom used, would be sufficient to test a wagon scale. The average wagon scale is not sensitive enough to permit its testing with so small a part of the load that is to be weighed.

I wish to take exception to that part of Mr. Johnson's paper, where he says that the "rolling of a load from one end of the wagon scale to the other, and such like, does not test your scale." As a matter of fact, it does test your scale, if only by comparing one end of your scale with the other. There can be no question that your scale should weigh alike at both ends, and that the test by rolling a load from one end of a platform to the other end is very easily and conveniently made; and while it will not prove the accuracy of your scale, it will point out any discrepancy there may be between the two ends of the scale and will often indicate the need of a scale man and his paraphernalia.

According to that part of Mr. Johnson's paper which has to do with the deflection and distortion of scale levers and their plumb line, their variance in proportion to the consign of the angle or the disruption of the horizontal plane, I wish to say, that, after reading this paragraph, I have come to the conclusion that, in Mr. Johnson's opinion, it is absolutely impossible to make a scale that will weigh correctly. There is no other conclusion possible when one considers the following statement (I quote Mr. Johnson verbatim):

"You can hang a set of scale levers to a frame, and if they are not hindered they will hang plumb; but whenever you place a bearing plank with bearing feet attached on the knife edges, you will see that the levers will take a different position; and as you add weight they will go a little further in the same direction; then as you add more weight, deflection appears, and the error in seal will not be in proportion to the load applied, but will vary in proportion to the consign of an angle which the lever makes with the horizontal plane. We will admit for the sake of the argument that if your levers were built so that there could be no deflection it would be quite impossible to get a frame bearing plank, etc., true enough to prevent distortion in the levers when loaded, and this would be quite as effective as deflection."

In other words, it is not possible to secure a correct scale for any of the above reasons. Now, what I would like to know is, what is the grain trade going to do about this serious business?

Another thing I would like to know is, why, in spite of the impossibility of in any manner constructing a scale that will, first, not deflect; second,

not move out of plumb; third, not retain its horizontal plane—I say again, what I should like to know is, why, in spite of all this, Mr. Johnson found 49 per cent of the scales he tested correct, light as well as loaded, which to me signifies that there must be some scales where the mathematical calculation as regards their multiplication remains true, even though they are placed under load.

In conclusion, I would ask Mr. Johnson why he reports the error in the incorrect scales he tested as weighing so much to the 1,000 pounds, heavy or light, as the case may be. This method of reporting errors in scales would lead one to believe that in spite of his remarks concerning multiplication he did and does figure errors found in scales at so much per 1,000 pounds, the amount he uses to make the tests.

Yours truly,
A. G. ZEIBEL,
Scale Supervisor, C. G. W. R. R.

Oelwein, Iowa.

[Mr. Johnson has very kindly agreed to answer Mr. Zeibel's questions in the August number of this paper, his numerous engagements between July 2, when we received the above, and publication day, preventing his doing so in this issue.]—Editor.

SOUTH AFRICAN EXPORT CORN.

The Commercial Intelligence Branch of the British Board of Trade has received a copy of a report by Sir Thomas Price, K. C. M. G., late manager of the South African Railways and a member for the South African Railways Board, on the storage and handling of grain in Europe and North America, based on his observations on a recent visit to those continents for this purpose. It is recommended in the report that the general methods obtaining in Canada and the United States for the handling and transport of grain in bulk be adopted in South Africa. Three or four country elevators and a terminal elevator should first be erected with an assurance that elevators will be provided at the other ports after the first has been completed and tried. Grain should not be granted a reduced export rate on the railways unless cleaned at the elevator. The Agricultural Department should undertake the grading.

In reference to the above-mentioned report, the Imperial Trade Commissioner at Durban states that he understands that, in the construction of the new wharves at Durban now approaching completion, provision has been made for the erection of elevators.—Board of Trade Journal.

INDIA WHEAT ELEVATOR PROBLEM.

The revised financial statement of the Punjab for the current fiscal year, says Consul Lupton, at Karachi, India, contains a provision of funds (\$64,880) for the erection of a wheat elevator at Lyallpur, the seat of the Punjab Agricultural Experiment Station. It is stated that storage accommodation was insufficient during the past year. The estimate adds:

"It is hoped that, if the government leads the way, private enterprise may be directed to this channel, which has been found so useful in America, not only for the storage of wheat but also enabling the cultivator to get it properly classified and to obtain credit for his produce without putting it immediately upon the market. The success of the venture cannot be assured without the co-operation of the Northwestern Railway and of the port authorities at Karachi; but if it is demonstrated that the elevator system is suitable to the requirements of the great wheat-producing tracts in the Punjab, it will clearly be to the interest both of the railway and of the port to provide facilities for export in bulk."

I am of the opinion, says Consul Lupton, that this will be the entering wedge for the construction of elevators in Northwest India. The opponents of the system claim that no trust can be placed in the probity of the persons placed in charge of the elevators, and that false certificates will be responsible for more trouble than is found in the present system. Certain exporters in Karachi by long residence, etc., have acquired facilities for handling export wheat which are superior to those of the later comers and do not wish to see their competitors placed on an even footing. Furthermore, the Port Trust has been committed to a very large expenditure for additional stacking grounds for export, and they are loath to admit that this expenditure (about \$1,297,600) is practically wasted. Although a local firm last year requested a site in the Karachi harbor for erecting an elevator at its own expense, permission was refused by the Port Trust.

It is very probable that this work at Lyallpur will be placed in the hands of the Public Works Department, although this is not certain; but information in regard to this work will probably be given out later by the Financial Secretary at Lahore.

A scarcity of tonnage from Pacific Coast to Europe available for grain is reported.

FIRES-CASUALTIES

The farmers' elevator at Penora, Iowa, burned to the ground, June 30.

J. R. Herriott's elevator was razed at Arnold, Ohio, by a storm, June 16.

The elevator at Luxembourg, Wis., was struck by lightning and burned July 3.

Fire did considerable damage to H. A. Schmitt's elevator at Eldora, Iowa, June 28.

The Crawford elevator at Taylor Ridge, Ill., was destroyed by fire, June 17. The loss is about \$5,000.

known. The loss, \$20,000, is partially covered by insurance.

Fred Kile's elevator was blown over at Kileville, Ohio, during a severe storm, June 16.

Ira Lee lost an arm in the grain conveyor of the Lenoir Oil and Ice Co.'s plant at Kingston, N. C., recently.

The Union Pacific Grain Elevator in Armourdale, Kan., was destroyed by fire, June 21, with 5,000 bushels of grain. The loss is about \$250,000.

The grain warehouses, owned by H. F. Elliott & Co., at Minneapolis, were badly damaged by fire June 25. The loss is about \$10,000. The fire started

Fire of unknown origin did about \$5,000 damage to the warehouse of George Conner & Sons, at Grand Rapids, Mich., recently. The loss is covered by insurance.

The elevator of Cruikenshank & Wright at Prairie Depot, Ohio, was totally destroyed by fire, July 6. The loss is fully covered by insurance and the house will be rebuilt at once.

The Farmers' Elevator at Parker, S. D., was burned to the ground June 21, the total loss amounting to about \$9,000; insurance, \$4,000. The fire is believed to have started from an engine spark.

The 8-year-old son of Jess McCoy was accidentally dumped into the corn pit of the Cassady & Whiting Elevator at Whiting, Iowa, with a load of corn. Although in the pit five minutes he was resuscitated.



ELEVATOR DISTRICT OF THE CITY OF REGINA AFTER THE TORNADO.

A spark from a passing engine started the conflagration.

The elevator of the Northern Supply Co., at De-ronda, Wis., was destroyed by fire recently.

The elevator at Ossian, Iowa, was struck by lightning, June 29, but not much damage was done.

The Penn Elevator was destroyed by fire at Penn, N. D., June 24, entailing a loss of about \$20,000.

The Farmers' Elevator Co., at Gary, Minn., received \$2,850 insurance to cover their recent loss.

The Security Elevator Co. of Young America, Minn., had an elevator damaged by lightning July 1.

Both elevators at Randolph, Minn., were destroyed by fire, July 8, with a loss of \$8,000. The property was insured.

F. A. Sission's \$7,000 elevator burned at Stoddard, Neb., recently. The loss was partially covered by insurance.

An elevator at Hillsboro, Ind., was totally consumed by fire June 15, entailing a loss of \$17,000. It will be rebuilt soon.

Fire destroyed all the buildings of the Mt. Diablo Commercial Co., at Concord, Cal., recently. The loss is estimated at \$25,000.

Lightning struck the elevator of the Reesy Grain Co., at Minden, Ia., in a recent storm, damaging the roof considerably.

Fire, originating from some coal left in the cupola of Kimball Bros. Elevator at Council Bluffs, did about \$100 damage, June 15.

Ringlein's Elevator at Leipsic, Ohio, was destroyed by fire recently. Mr. Ringlein's loss was about \$15,000; insurance, \$6,000.

The seed house of the Louisville Cotton Seed Products Co., at Louisville, Ky., was destroyed by fire June 13, entailing a loss of \$15,000.

Fire destroyed the elevator of the Farmers' Co-operative Co., near Lenox, S. D., June 22. Spontaneous combustion is given as the cause.

The Farmers' Elevator at Yale, Iowa, was destroyed by fire, June 29. The building was a total loss, but there was very little grain in it.

The hay and storage barn of S. Bash & Co., at Fort Wayne, Ind., was totally destroyed by fire, July 3. A large portion of the loss is represented in 200 tons of hay. The origin of the fire is un-

known. The loss, \$20,000, is partially covered by insurance.

A broken stay bolt in an overtaxed bin in Wolfe Bros.' elevator at Fremont, Ohio, caused the bin, holding several thousand bushels of wheat, to give way.

The South Side Elevator, at Vincennes, Ind., owned by William H. Vollmer and others, was destroyed by fire, recently. The loss, \$10,000, was

The broom corn outlook in northeastern Oklahoma is said to be better than for several years, with a larger acreage.

New rye was bought at Chicago on June 28 at 75c for July-August shipment or equal to 34½c per bushel under July delivery price for wheat.

Buried away in the daily news columns recently were two items which, if true, will mean much to the United States. One was the discovery of a deposit of high grade iron ore in the Blue Ridge Moun-



SHOWING HOW THE TORNADO AT REGINA SCATTERED DEBRIS AND AVOIDED SOME BUILDINGS.

partially covered by insurance. The fire started in a cob pile.

Robert Brown, son of Frank C. Brown, who owns the elevator at Hammond, Ind., was recently drowned in the Kankakee River. The father witnessed the accident, but was unable to rescue the boy.

tain in Fulton County, Pa., estimated at 1,000,000,000 tons. The other was the discovery by Government scientists of deposits of potash in California, estimated all the way from 4,000,000 to 10,000,000 tons. Any one with an imagination may see what these two discoveries mean to the American people.—Inter Ocean. The ore find proved to be a myth.—Ed.

BARLEY and MALT

California barley began going to market by June 20.

The Wisconsin crop of barley this season promises to be as large as any yet harvested in that state.

The first cutting of barley near Lewiston, Idaho, was on June 29, the yield averaging 50 bu. per acre.

Portland, Ore., reported in June the making of barley contracts for future delivery at \$35 per ton tidewater.

The California barley crop is evidently spotted, as some localities report big yields of fine quality and others next to nothing.

Stockton, Cal., on June 25 shipped 700 tons of new barley to the Sperry Flour Co., San Francisco, to be exported to Chili.

The Canadian Malting Co. of Calgary has let the contract to the Canadian Stewart Co. for the erection of a 500,000-bu. elevator and malt house.

On June 15 farmers were still seeding barley in Cavalier County, N. D., where the acreage was reduced by 30 per cent; yet this is one of the largest barley centers of the state.

It is predicted that Milwaukee will handle more barley the coming fall than ever before; in fact, some of the commission men look for a record breaking season as far as barley is concerned.

What might be called good malting barley was wanted at the late decline in the market and the feeding qualities were salable at the difference, with a range of values from 55 to something about 90. Minneapolis receipts were small and for malting barley there was no lack of demand, while feeding grain had friends among the buyers dealing in it. The new crop is coming on fine and is well heading out for the harvest. Late prospect of it is favorable. The old crop was a small one as was that of 1910. Buyers wanting barley for malting are watchful of the arrivals and the demand for it is good. General markets have declined from the top figures of the season and local prices have been in sympathy with the general conditions, but good barley moves well.—Minneapolis Market Record.

[Special Correspondence.]

CHICAGO BARLEY MARKET.

BY A. L. SOMERS,

President Somers, Jones & Co.

The hot weather demand for barley, while somewhat delayed, has at last set in and is closing the season's barley business at firm prices. Good malting barley is salable at from \$1.05 to \$1.10 per bushel, showing an advance of from 10c to 15c per bushel from low point of a few weeks ago. Malting barley ranges 80c to \$1.10 and feed barley 55c to 70c. Strictly feed qualities are extremely slow, the result of the decline in oats.

The Government crop promise is for 194 million bushels of barley and for 1,139 million bushels of oats. The crop outlook is so promising that these figures are likely to be exceeded in the final results, and if so it is likely to bring about a return to old time conditions, when malting barley values were based to a very large extent on feed or oat mixing values.

It is too early to say much about the course of new barley values. The stocks in consumers' hands are so extremely light that we look for pressing demand for the new barley right from the start. This early demand will probably last a few months and is likely to force prices higher for the first few months of the season than warranted by the present crop outlook.

September oats at this writing, Thursday, July 11, are 35c per bushel, the equivalent of 52½c barley on the pound basis. A few years ago a premium of from 5c to 10c per bushel for malting barley over this feed basis was all that the trade expected to have to pay, but with the light stocks it is quite probable that a larger premium will be paid, for a short time at least. We would not be surprised to see malting barley range somewhere from 55c to 80c per bushel, possibly even a little over the outside for the best of it. The market after the first pressing demand has been filled is likely to sag off somewhat.

We have watched the growing crops very carefully this year and from impressions gained from observations made in person and from reports received from our many correspondents, we look for heavy yields of barley and oats. The barley fields in a large part of the best of the barley territory show a crop promise of 50 bushels or more per acre and of 75 bushels or more of oats per acre. It will take only a few more days of favorable weather to secure these heavy yields, and it makes it a distinctly bearish outlook, as far as barley and oats values are concerned.

The California and other Coast barley has declined materially during the past few weeks, with sales as low as \$1.35½ per cental for December, against \$1.60 and over a few weeks ago. This decline is naturally the result of the fine crop promise in the Central States. If the barley crop in the Mississippi Valley territory matures up to the pres-

ent promise and the expected low prices actually result, it will preclude any demand of moment for the Far West grain. The high freight rates, from 55c to 62½c per hundred pounds, are practically prohibitive. The Coast territory, however, generally has European demand for its barleys sufficient possibly to prevent a further decline of moment there.

As a whole, we look for an active trade in barley this year and a larger business than for several years.

THE BARLEY ESTIMATE OF JUNE.

Wm. H. Prinz concludes a long and exhaustive review of the Government crop report of June on barley by saying:

"Now let us summarize the report. In regard to acreage, I must state again that it is more than a million acres overestimated, and as to its yield of 25.2 bushels per acre, such an estimate should not have been made, and furthermore should not have been published, as it is misleading and does not mean anything, but only creates trouble in the trade and destroys confidence in the Government reports.

"Last year at this time the Government reported everything in regard to barley in the finest condition, and that a high yield was promised, 24.9 bushels per acre, against 25.2 bushels this year; but we all know how it turned out. It is entirely too early to even estimate the yield of barley. Barley is never safe until it is harvested, and then after harvest, if not the proper care is taken, it will spoil. One thing is certain, however; that is that we are starting out with better ground conditions and plenty of sub-soil moisture, with the exception of California, where the weather has been cold and dry the earlier part of the season.

"For the rest of the principal barley raising states, although we are from two to three weeks late and what happened in June last season may happen in July this year, everything looks promising so far, and the outlook is for a better and larger barley crop than last year.

SURPLUS CORN MARKETS.

The chief market for the surplus corn of practically all nations is the nonproducing countries of western Europe, i. e., the United Kingdom, Germany, Netherlands, Belgium, and Scandinavia; the producing countries, France, Spain, Portugal, Italy, and Switzerland, also supplement their native supplies by takings of foreign corn. Outside of Europe the most noteworthy importers are the corn-producing countries, Canada, Mexico, Cuba, and Egypt; in Mexico the tortilla prepared from this grain is the chief food of the masses. In northern Europe corn is not used as human food excepting in Ireland, nor has it attained very great popularity as an animal food, oats, barley, pulse, and particularly root crops being much more generally used for animal nutrition than in southern Europe or in the United States. In the autumn of 1911 the hay and root crops were exceptionally deficient in Great Britain, Germany, and France, and heavy requirements of imported feedstuffs were generally realized in the spring of 1912. In normal years there is a demand in the importing nations of Europe for from 200,000,000 to 250,000,000 bushels of foreign corn, including that brought in from European surplus-producing States. The United Kingdom constitutes by far the most important market and over half of her supplies in 1910 came from Argentina, only about one-seventh from the United States, about the same proportion from Roumania, and almost a tenth from possession of the British crown—British South Africa, British India, and Canada.

IMPORTS (GENERAL) OF CORN INTO THE UNITED KINGDOM BY COUNTRIES OF ORIGIN, CALENDAR YEARS 1908-1910.

Countries of origin.	1908. Bushels.	1909. Bushels.	1910. Bushels.
Argentina	36,915,600	45,002,800	39,878,800
U. S.	13,364,400	14,138,350	10,395,000
Roumania	8,640,200	8,911,000	10,177,400
Russia	7,160,800	6,784,200	5,166,200
British S. Africa.	583,600	1,892,400	3,547,588
British India	19,400	231,000	1,934,800
Canada	277,000	222,200	1,575,800
Turkey	15,400	40,800	283,800
Other countries ..	696,600	1,502,460	1,082,996

Total 67,682,000 78,725,210 74,042,384

Germany received about one-third of her total imports of corn in 1910 from Argentina, one-sixth from the United States, about one-eighth from Russia, a ninth from Roumania, and smaller proportions from British South Africa and Servia, respectively.

J. C. Walters has disposed of his business at Everdell, Minn., and taken charge of the farmers' elevator at Blabon, N. D. Mr. Taplin, the former manager, will travel for the Northwestern Elevator Co.

TRANSPORTATION

Wheat rates to Europe from Pacific Coast (sailing vessels) advanced to \$8.52.

The railrate on grain east from Buffalo was marked down a cent on July 1, to 4.5c export and 6.5 domestic.

The railroads at Toledo have agreed to maintain hereafter a cooperage department to repair grain cars before loading.

High insurance rates are said by seamen to injure Montreal's export traffic in grain, the wheat rate there being a cent higher than via U. S. ports.

Montreal has been suffering from an intense grain congestion since navigation opened, and permanent relief is expected only when the new harbor improvements are completed.

Grain men at New Orleans are seeking to get rid of some of the red tape surrounding shipments to Cuba and other Latin-American ports, chiefly by facilitating the issuance of Bs/L.

The Commerce Commission has under advisement the request of the roads to raise hay rates to Chicago from the West. The advances sought range between 20 and 70 cents a ton, and would mean, it is said, a yearly addition to freight rates on hay reaching Chicago of approximately \$150,000.

Washington advices of July 6 say: Gross frauds and violations of law in the exercise of the transit privilege accorded to shippers of grain, grain products and lumber have been revealed by the Commerce Commission's investigation on that subject just completed. The railroads will be required to establish drastic regulations to safeguard the operation of the privileges in the future." [See details on another page.]

The Chicago Board of Trade transportation department announces that effective July 8, 1912, the C., R. I. & P. Ry. Co., in connection with rates on grain and grain products from its stations in Iowa, Minnesota and South Dakota, to Mobile, Ala., and New Orleans, La., including stations on the New Orleans & Northeastern R. R., Slidell, La., and south thereof, has provided routing via Monon Route and Southern Ry. This route applies via Chicago, with transit privileges, in addition to the routing via the C. & E. I. R. R., which has been in effect.

In the Van Natta Bros. case from Indiana, the Commerce Commissioner on June 21 held that the railroads hereafter must cease to maintain exorbitant rates on grain shipped from their elevators at Templeton, Atkinson, Fowler, Earl Park and Raub, Ind., and from Sheldon, Iroquois and Donovan, Ill., via Chicago to Eastern and interior eastern points and ordered that on or before August 1 they must establish "reasonable" rates from these shipping points and also grant the usual transit privileges at Chicago with rates that shall not exceed those contemporaneously maintained by the Chicago & Eastern Illinois and Chicago, Indiana & Southern railway companies on grain moving via Chicago to Eastern or interior Eastern points with the usual transit privileges at Chicago from the following points: Pine Village, Oxford, Swanington, Barse, Lochiel, Wadena, Goodland, Brook, Dunn, Fiel, York, Kentland, Shell, Ade and Morocco, or by withdrawing from participating in the transportation of grain from the Indiana points to eastern or interior eastern destinations which has been, is or shall be accorded the usual transportation privileges at Chicago under tariffs provided for such privileges.

DEMURRAGE RULES ENDORSED.

The Commerce Commission, on June 24, issued this statement:

"The Commission has given to the revised National Car Demurrage Rules, recently adopted by the American Railway Association, the same tentative endorsement given to the Rules heretofore in force. Several changes have been made in the Rules and their explanations and instructions, which will obviate the controversies heretofore inevitable under the old Rules.

"The causes for the cancellation or refunding of demurrage charges by the carrier have been made in several particulars more liberal for the consignee. When the condition of the weather during the prescribed free time is such as to make it impossible to employ men or teams in loading or unloading, or when it is impossible to place freight in cars or move it from cars without injury to freight, the free time is extended until a total of 48 hours free from such weather interference shall have been allowed. No demurrage shall be assessed when shipments are frozen while in transit so as to prevent unloading during prescribed free time nor when it is impossible to get to cars for loading or unloading during the prescribed time because of high water or snowdrifts.

"When cars are bunched and delivered by the carrier in excess of daily shipments, the consignee is now allowed to present to the carrier's agent within fifteen days claim for such free time as he would have been entitled to had the cars been delivered in accordance with the daily rate shipment.

The revised rules are more explicit as to notices mailed by carrier. The provision is eliminated, which heretofore provided that credits earned on cars belonging to one class of equipment should not be used in offsetting debits accruing on cars belonging to a different class of equipment."

ALLOWANCES RULING.

The Commerce Commission on July 2 by order extended the territory in which allowances may be paid by railroads to shippers for elevation of grain so as to include grain markets on the Ohio and Mississippi Rivers, on the Great Lakes and at Chicago.

It was held that one-fourth of a cent a bushel would be a fair compensation for transportation elevation at those markets, and that for both transportation and commercial elevation the compensation should be three-fourths of a cent a bushel.

The following charges for processes in transit were recommended: Storage, ten days, or part thereof after the first ten days, $\frac{1}{4}$ cent a bushel; clipping, $\frac{1}{4}$ cent; cleaning, $\frac{1}{4}$ cent; mixing, $\frac{1}{8}$ cent; sulphuring, $\frac{1}{8}$ cent; drying, from 1 to $1\frac{1}{2}$ cents; sacking, $\frac{1}{2}$ cent, sacks and strings to be furnished by owner of the grain.

The order is withheld until reasonable apportionment has been afforded railroads and shippers to adjust their affairs on the basis recommended.

TO EXTEND THE LAKE SEASON.

A movement to keep navigation on the lakes open until December 31, except in such years as the weather is too severe, has been started by the Buffalo Corn Exchange. The special committee having the work in charge is F. F. Henry, Charles Kennedy and H. T. Kneeland, Jr. They say that the increased production of grain and the lateness of the harvest in the Canadian Northwest necessitates the keeping of lake navigation open for a longer period than the regular custom, as it is the practice of closing about December 1. They present figures from government reports to show that in the month of December during the past eleven years the average number of storms do not exceed those in September or November. By keeping the lake open during December a large quantity of grain can be moved by lake to Buffalo from Lake Superior, that must either be shipped by rail during the winter or remain stored at Duluth, Fort William or Port Arthur until spring. If it is at Buffalo it can be more easily distributed. The Lake Carriers' Association is asked to take action with the government officials so that proper appropriations can be secured in estimates for the next fiscal year to enable all proper aids to navigation to be kept in operation as late in December as the season will allow.—Inter Ocean.

NEW RATES ORDERED IN THE NORTHWEST.

Holding that rates on coarse grain from points in South Dakota on C., M. & St. P. Ry. from Canton to and including Elk Point to be discriminatory against Omaha and unduly preferential to Minneapolis, the Commerce Commission has ordered that road to establish, by September 1, rates to Omaha not less than $1\frac{1}{2}$ cents a hundred pounds lower than those contemporaneously exacted from the same points to Minneapolis.

The Commission also decided that the rates on grain and grain products from points in Minnesota, North and South Dakota, and northern Iowa, through Duluth, Superior, and Milwaukee to Atlantic seaboard points, lake and rail, were not discriminatory, as compared with like rates from Chicago; that as to grain traffic in that territory "the conditions of transportation are so substantially similar that distance must be controlling; that the rates on grain from South Dakota, Minnesota, and Iowa to Duluth-Superior should not exceed the rates to Milwaukee or Chicago for equal distances; that the grain rates to Milwaukee from portions of South Dakota, Minnesota, and Iowa should not exceed the rates to Duluth-Superior for equal distances; that the Great Northern's differential on grain at Willmar, as between Minneapolis and Duluth-Superior, should not exceed 3 cents, and that that differential should not be exceeded from any point on the Great Northern beyond Willmar to and including Sioux City, Iowa, and Yankton and Huron, S. D.; this adjustment to be made by reducing the Duluth-Superior rates to not more than 3 cents above the present Minneapolis rates; that through rates on grain via the Soo Line, the Northwestern-Omaha system, or the Milwaukee system to Duluth-Superior via Minneapolis should in no case exceed the rates from the same points to Minneapolis by more than 4 cents."

Ray M. Beaty has accepted a position as grain buyer for the Crown Elevator at Clinton, Minn.

William Forney of Pilot Mound, Iowa, has taken the management of the Farmers' elevator at Jolley, Iowa.

John Sauter, an employe of the Seheld Grain Co. of Middletown, Ohio, married Miss Edna Long recently.

IN THE COURTS

The Ohio Hay & Grain Co. has brought suit against the Lake Erie & Western Ry. and against the Northern Ohio Ry. to recover excessive freight charges.

The Burnell Engineering and Construction Co. filed suit against E. A. Allen, owner of the Octa Elevator at Octa, Ohio, asking \$3,301.33 building contract.

Lang, Atwood & White, engaged in the flour mill and elevator business at Evansville, Minn., have filed schedules in bankruptcy, stating their liabilities at \$26,235.10 and their assets at \$14,650.85.

An injunction has been filed against J. A. Hughes by the Howe Grain and Mercantile Co. of Howe, Texas, asking that the defendant be restrained from using the name "The Howe Grain Co." in the operation of his business.

David A. Flemming has brought suit against the Union Grain Co. of Pittsburg, Ohio. The plaintiff alleges negligence on the part of the defendant in allowing a corn bin to remain open, into which he fell, sustaining serious injuries.

A suit will be brought against George and Edward Knollhoff, executors of the estate of Frederick Knollhoff, by the Smith-Hippen Co. of Pekin, Ill., in the circuit court for \$2,000 to collect on a defaulted contract made by the Knollhoffs to deliver certain corn.

An investigation is being made by the Newark Hay & Grain Co. of Newark, N. J., into the manner in which some of the employes of the firm are alleged to have taken \$20,000 worth of stock during the past year. Several arrests have been made of the company's drivers who are supposed to have worked in collusion with customers. Two teamsters have pleaded guilty of stealing a number of bags of grain.

Daniel Grandin, a grain dealer of Chautauqua County, N. Y., secured a reopening of his petition in United States District Court in order that further evidence might be taken. The case concerns three drafts, aggregating \$1,684.80, on Hinman Bros. of Deposit, N. Y. The Knapp Bank of Deposit, where the drafts were placed for collection, failed before payment was made. Grandin is fighting for payment in preference to the creditors.

Oliver P. Hiett, who brought suit against the Turner-Hudnut Co. of Pekin, Ill., as mentioned in the June issue, has filed a petition in bankruptcy. L. W. Allison, the receiver, was appointed trustee with bond in the sum of \$3,000. At the creditors' meeting Mr. Hiett testified that in the suit with the Turner-Hudnut Co. he obtained a judgment for \$7,000, but a motion of a new trial being sustained, he was unable to collect the sum due him and to pay his debts and, as a result, he found it necessary to go into bankruptcy.

Charles England & Co., of Baltimore, have brought suit against Duffy & Harrington at Fowler, Ind., claiming the defendants are indebted to them to the amount of \$700. The suit has grown out of a 1907 consignment of seven carloads of oats to the plaintiff by the Indiana firm. The Indiana firm, it is alleged, drew too heavily on England & Co., who refused to accept the drafts, which were reduced but not enough to suit. England & Co. were then told by the defendants to handle the oats and they would pay the difference between their value and the drafts. They say they did this, but that the defendants failed to live up to their agreement.

The test case of the Northwestern Elevator Co. against the Great Northern R. R. Co., mentioned in the June issue, has been completed. The jury returned its verdict for \$417, upholding the elevator company on all but one claim presented. Eleven counts had been withdrawn and several were settled out of court, the road allowing \$200. The point at issue was that the alleged shortage in weight took place between the time of loading and unloading the grain, and the state weighing department certificates showed no leakage of cars. The Northwestern Elevator Co. has \$15,000 of similar claims in reserve, and other shippers have varying amounts. An appeal is probable.

John Kayser and others of Parkston, S. D., A. A. Truax of Mitchell and M. King of Sioux City stand to lose about \$40,000 each through the M. T. Shepherdson Grain Co.'s recent failure. These liabilities are mostly in the form of notes, signed by these grain men to cover the obligations of the Shepherdson Company. The guarantees were applied, it is alleged, to about \$260,000 of the indebtedness. When the officers of the company decided to incorporate in 1909, the South Dakota grain men were taken into the firm, although few cash payments were demanded on the stock. The new men signed the guarantees. When the corporation was completed, the old partnership debts were carried along, the officers making the necessary payments from the guarantees. The creditors believe now that this debt was wiped out with the new stockholders' money. Kayser, Doering and Zehnpenning are plaintiffs in a suit pending in the Federal court in

South Dakota, asking that \$33,000 worth of paper given to the Fort Dearborn National Bank of Chicago, be set aside. The bank has begun action for collection on the securities.

The Sam Hall Grain Co. of Maribel, Wis., brought suit against the C. & N. W. Ry. Co. the value of 100 bushels of rye which were claimed to have been stolen from a car at Maribel. After the jury had been drawn and the first witness was on the stand, it was discovered that the grain weigher at the Maribel elevator had made a mistake in adding. The case was dismissed.

The Attorney-General of Washington, in an opinion to the Public Service Commission, holds that a private tramway operated in connection with a grain storage warehouse comes under the jurisdiction of the Public Service Commission by reason of the grain inspection act, although not under the common carrier act. The Mayview Farmers' Union asked the Commission whether it had the power to regulate charges on the private tramway, complaining that the rates were exorbitant. The grain inspection act gives the Commission jurisdiction power over warehouses and therefore over all accessories, holds the assistant Attorney-General.

PERSONAL.

Chas. E. Gillin is the new grain buyer at Fayette, Iowa.

W. F. Maywoldt has accepted a position as grain buyer at Melvin, Iowa.

Silas W. Moss has engaged in the grain and feed business at Richmond, Ky.

W. P. Buckingham has taken the management of an elevator at Gull Lake, Sask.

Emil Paarman was elected manager of the Farmers' Elevator Co. at Stockton, Iowa.

Thos. H. Beggs has become manager of the Hunting Elevator Co. at Hawkeye, Iowa.

Arno Spranger will buy grain for the Northwestern Elevator Co. at Woodstock, Minn.

Giles Evans, of Lohrville, Iowa, has taken charge of the Farmers' Elevator at Churdan, Iowa.

Lewis Thompson was re-elected as manager of the Farmers' Elevator Co. at Enderlin, N. D.

W. E. Johnson has assumed the management of the farmers' elevator at Farnhamville, Iowa.

S. J. Wills succeeds C. H. Barber as manager of the Western Elevator at Rockwell City, Iowa.

R. G. Gaskin of Covington, Ind., has become manager of the Covington Grain Co. at Foster, Ind.

S. E. Squires has taken possession of Radebaugh & Munson's elevators at Rippey and Angus, Iowa.

Theodore Johanson, manager of the elevator at Oto, Iowa, has married Miss Margaret Wagner of Turin, Iowa.

C. E. Price has been engaged as grain buyer for the Farmers' Elevator at Sherburn, Minn., for another year.

C. M. Beeman of Kasson, Minn., has been engaged as manager of the new Farmers' Elevator Company at Hayfield, Minn.

Verne Frazier, grain buyer of the Palmer Grain Co. at Palmer, Iowa, has married Miss Garnet Busby of Nevada, Iowa.

Wm. Bailey has severed his connection with the Western Elevator at Van Horn, Iowa, and John Miller succeeds him.

Clarence R. Devereux, wholesale hay and grain dealer of Concord, Cal., and Miss Nora D. Randall were recently married.

James O. Maley, who is engaged in the elevator business at Stamwood, Iowa, married Miss Josephine Carothers in June.

O. C. Vickey has resigned the management of the Farmers' Elevator Co. at Jolley, Iowa, to accept a similar position at Galva, Ill.

J. A. Beckwith, of Lena, Iowa, has moved to Luther, Iowa, to assume the management of the Farmers' Elevator at the latter place.

A. L. Wood has resigned his position as manager of the Farmers' Elevator at Rothsay, Minn., to travel for a Minneapolis grain company.

Frank F. Flaherty, manager of the Belden Bros. Elevator Co. at Charlotte, Mich., recently married Miss Gertrude Messner of Grand Rapids.

Charles Schug, senior member of the elevator firm of Schug & Horn, of Monroeville, Ohio, and Miss Clara Boehler were recently married.

John Holmes, late manager of the Co-operative Elevator Co. at Lewis, Kan., is now managing the McCullough Grain Co. in Hutchinson, Kan.

Howard Andrus, employed by the Independent Grain & Lumber Co. at Woolstock, Iowa, recently married Miss Clara McKay of Little Falls, Minn.

New Orleans in June, 1912, exported 84,902 bu. of wheat, 211,136 of corn and 3,671 of oats. All to Latin-America.

ASSOCIATIONS

The new-membership campaign of the National Hay Association to June 21 added 170 names to the list, of which 86 are credited to the secretary, 24 to Vice-President Cole of Kansas City, 10 to Bridge & Leonard, Chicago, and 7 to Huffine & Co., Kansas City.

The Oklahoma Hay Dealers' Association has been organized at Wagoner by the election of the following officers: President, W. L. Harris, Inola; vice-president, V. Lamb, Wagoner; secretary, M. Martin, Checotah. The annual convention will be held in Muskogee the first Monday in May, 1913.

Secretary Gibbs of the Texas Association, Fort Worth, has published his membership list revised to July 1, 1912. "It is gratifying to report," he says, "that we have at present the largest membership list reported since the year 1905, when 158 were on the roll. We now have 141 active members; and it is hoped that our number will reach 150 before the close of the present season. The application of Bradley Elevator Co., of Bradley, Okla., is now pending. The firm name of Howe Grain Co., Howe, Texas, has been changed to Hughes & McCoy, same location."

Secretary Strong, Urbana, reports the following new members of the Illinois Association: Harry Woods, 521 Postal building, Chicago; Adolph Kempner Co., 50 Board of Trade, Chicago; H. S. Antrim & Co., Cairo; C. B. Fox, New Orleans, La.; Thomas Sudduth, elevator at Van Wood, Springfield; J. J. Connerly, Millersville; Dean L. Moherly, 303 East Main street, Streator; V. L. Anderson, Sheridan; B. L. Christy, Viola; R. E. Zenke, Indianola; Bonges & Hatton, Cedar Point; J. H. Ernest, Arcola; John Holbrook, Ashley; Pierce & Hamilton, Gifford; W. C. Williams, Wady Petra, Stark P. O.; Center Lumber Co., Burgess, Viola P. O.

Secretary J. Vining Taylor reports the following new members of the National Hay Association since last report: Alex E. King, Columbia, S. C.; Tony A. Ferlet, Anthony, New Mex.; E. J. Webb, Butler, Okla.; Rhinelander Produce and Commission Co., Rhinelander, Wis.; Webster & Ruby, Rusk, Okla.; Michael Nolan, Saltfork, Okla.; Goffe & Carkener Co., St. Louis; St. Joseph Hay and Feed Co., St. Joseph, Mo.; Collins & Swallow, Lake, Ind.; W. F. Cantelon, Foss, Okla.; J. B. Ruthrauff (representing Huntley Mfg. Co.), Wichita, Kan.; Wysox Produce Co., Towanda, Pa.; Spring City Hay Co., Neosho, Mo.; B. C. Harding, Woodford, Va.; R. P. Atwood & Co., St. Louis; Chatterton & Son, Mt. Pleasant, Mich.; S. T. Merritt, Sattinell, Okla.; Brannan-Seignious Co., Atlanta; W. L. Harris, Inola, Okla.; V. Lamb, Wagoner, Okla.; R. W. Talbot, Wainwright, Okla.; A. D. Young, Watova, Okla.; Everett B. Palmer, Denver; J. W. Tracy, Thomas, Okla.; Richards Hay and Grain Co., Richards, Mo.; P. B. & C. C. Miles, Peoria; Athens Farmers Store Co., Athens, Wis.; C. H. Wade, Paris, Ill.; E. D. Osborne, Arnprior, Ont., Can.; F. M. McClelland & Co., St. Louis.

On June 13th, Mr. S. W. Strong, secretary of the Illinois Grain Dealers' Association, attended a meeting of the Western Passenger Association in room 2150 of the Transportation Building, Chicago, at which meeting the subject under discussion was a request from the Illinois Grain Dealers' Association to the Western Passenger Association lines to transport test weights of the official scale inspector of the Association under excess baggage rules. The contention of the Illinois Grain Dealers' Association was that all lines of railway have a special financial interest in the proposition to have scales of grain shippers kept in accurate condition; that the interest of the carriers is equal to that of the shippers in having loading scales tested frequently; and that inspection would very materially lessen claims for loss in transportation; in other words, the carriers would be assured that claims which were filed by members of the Illinois Grain Dealers' Association, whose scales are inspected frequently, are accurate and just, and it would relieve the carriers from the suspicion of shippers that claims might be held up on account of variation of scales or inaccuracies. The question is under consideration with the Western Passenger Association, who have taken up the question with the railway lines in the state of Illinois, with a view of getting uniform action in the matter.

COMING ASSOCIATION MEETINGS.

National Hay Association, Kansas City, July 16-18.
New York State Hay Association, Syracuse, July 26-27.

Grain Dealers' National Association, Norfolk, Va., Oct. 1-3.

KANSAS ASSOCIATION AND INSPECTION.

Secretary Smiley has been holding local meetings in Kansas to discuss the inspection problem, the Supreme Court having practically wiped out the law now on the statute book, by deciding that compulsory inspection of grain other than that going into public elevators is unconstitutional. The

situation is therefore that Kansas grain men must either handle the matter of inspection through their boards of trade or another inspection law must be passed. At a meeting at Salina it was the opinion of those who spoke that inspection should be taken out of politics. In the past grain inspectors have been given their places without regard to their ability and the result has been that in most of the cities in Kansas, "the inspector knows no more about grain than a school teacher." No action was taken at this meeting, but the opinion of most of the grain dealers was expressed by one member, who said: "We want to put grain inspection on a civil service basis. Every inspector should be put through an examination and his appointment should be entirely outside of politics."

At Hutchinson, from 100 to 125 dealers were present. Secretary Smiley advocated the use of inspectors and samplers appointed by the Board of Trade of Hutchinson, Wichita, Kansas City, etc. He said that, at least, those employed by the state had not been competent, and that while they could not easily be removed those appointed by the Board of Trade could be.

Those present at Hutchinson seemed to be in favor of the sample system rather than grading by inspectors; by the sample system the grain is sold on its merits strictly and not by grade.

The following resolution was adopted expressive of the opinion of those present:

"Resolved, That the secretary of the Kansas Grain Dealers' Association appoint three members of the Association to meet with three members of each board of trade to formulate rules conforming to the law and yet result in satisfactory inspection."

The dockage system was disapproved of.

BETTER CROP REPORTING.

A notable advance in the science and methods of reporting and estimating the country's crops in the ten years between censuses is shown by comparison of the records of the Department of Agriculture and the Bulletin Concerning Agriculture in the Census of 1909, just put out by the Census Bureau.

In the figures of the production of six important cereal crops, the Agricultural Department records for 1899 show 894,000,000 bushels less than the Census Bureau figures. In the same cereals the Department's figures are 275,454,000 bushels ahead in 1909. The main difference in 1909 is in the corn crop total, which the Department of Agriculture estimated at 2,773,376,000 bushels, and the Census Bureau counted at 2,552,189,630 bushels. And the difference was due to acreage estimates, the Department's correspondents counting 108,771,000 acres, while the census takers counted 98,382,665.

The Department of Agriculture estimated the wheat outturn in 1909 at 737,189,000 bushels, while the Census Bureau counted 683,379,259. The oats crop figures are very close, being 1,007,353,000 bushels by the Department, against 1,007,142,000 by the Census Bureau.

The differences are not any reflection upon the accuracy of the Department's estimate of conditions, which are getting to be as nearly accurate as it is possible to be, says the New York Times. Estimates of the 36,000 farmer correspondents of the Department about acreage seem to be slightly out of the way at times. This has been notably true of cotton fields. The working out of formulas as near correct to final outcome as the theory of chances can guarantee has progressed in the ten years, although it is almost impossible to avoid errors in estimates due to gradual changes in fundamental conditions. The formulas used for estimating growth of population in the United States, for instance, were found at the 1910 census not to have carried the population estimate along as fast as the real growth. The underestimates of the crops in 1899 are thought to have been due to a failure to reckon on the development of ten years in farming. And the overestimates of 1909 are probably due to the known fact that agricultural growth is at a less rapid rate than formulas allow for.

Omaha's first car of 1912 Nebraska wheat arrived on July 3 from York County and tested 62 lbs.

Knoxville, Tenn., received the first new crop wheat on June 21, one day earlier than in 1911. It sold for \$1.10 against 90c in 1911.

Pope & Eckhardt Co. on July 1 received the first car of 1912 oats delivered to Chicago. They were from the Southwest, Texas red, rust-proof variety, very light in color and sold at 49c. The first arrived last year was on July 10.

For the first time in the history of Chicago as a packing center, more lard was received here last week than was shipped out. This means that the entire manufacture during the week over and above local consumption was added to the local stock. The official records show receipts last week were over 200,000 lbs. more than shipped at 2,887,000 lbs., as against 2,673,000 lbs. This is the season of the year when the trade always expects an increase, but the current gain is far above the normal.—Record-Herald, June 23.

The CO-OPERATIVES

The Farmers' Elevator Co. of Westhrook, Tenn., broke even on last crop year's work.

The Farmers' Elevator Co., Sioux Center, Ia., made \$3,900 gross profit on last crop year.

The Farmers' Elevator Co., Spicer, Minn., handled \$62,978.10 of business and earned \$346.48 net.

In its first four months' business the Farmers' Co-operative Elevator Co. at Lester Prairie, Minn., made \$650.55 gross and \$299.92 net profit.

A Minneapolis paper says seven farmers' elevator companies in North Dakota and Minnesota had financial troubles during June and that some have ceased and others gone into hands of receivers.

The directors of the Fairmont, Minn., Elevator Co. submitted to the stockholders in June a proposition to sell out and quit as there is no longer grain enough marketed there to pay for keeping the house open.

The Osnabrock Farmers' Elevator Co., Osnabrock, N. D., in checking up its books at an annual meeting held during the past week is reported as having found considerable of a shortage in both its grain and coal accounts.

The Farmers' Elevator Co. at Flandreau, S. D., has authorized the president and secretary to sign notes not to exceed \$3,000 to obtain money with which to buy grain the coming year and a committee was appointed to solicit for new share holders and try to get present shareholders to pay in enough to pay the indebtedness.

The Farmers' Elevator & Supply Co. of Princeton, Mo., organized last winter with capital of \$50,000 to operate a grain elevator, has been rented by its officers. About \$10,000 was paid in on the elevator built, and early in July G. F. M. Bradbury and Rome H. Hickman, who were in charge of the business, along with all the books of the concern, disappeared. They had been buying grain heavily at Princeton and elsewhere. Other elevators financed by the company are under construction at Newton, and Harris in Mercer County. A warrant has been issued for Bradbury and Hickman, charging them with obtaining money under false pretenses. Farmers who have been selling grain to the concern stand to lose heavily.

Dividends.—Farmers' Elevator Co., Hayward, Minn., with receipts of \$136,000 since Sept., 1911, 7% and 5% and \$200 to surplus, no debts; Farmers' Elevator Co., Hardwick, Minn., 7%; Farmers' Elevator Co., New Ulm, Minn., 5%, handled 100,800 bus. of grain; Farmers' Elevator Co., Birkland, Mont., 50% (\$4,500) and 21% to surplus; Farmers' Elevator Co., Redfield, Ia., 44%; Rockville City (Ia.) Elevator Co., 8%; Farmers' Elevator Co., Beard, N. D., distribution of \$10,000; Farmers' Elevator Co., Milton, N. D., 40%; Farmers' Mutual Grain Co., Pekin, Ill., 6%; Farmers' Elevator Co., Craig, Ia., did \$133,400 worth of business and paid 8% on \$20,000; Farmers' Elevator Ass'n, Lowry, Ia., handled 51,154 bus., 100% (\$2,000) stock dividend; Farmers' Co-operative Grain Co., Fairview, S. D., 20%; Farmers' Elevator Co., Aurora, S. D., 10%; Farmers' Elevator Co., Darfur, Minn., 5%; Farmers' Elevator Co., Olivia, Minn., handled 140,000 bus., 1½%; Farmers' Elevator Co., Dassel, Minn., 10%; Farmers' Grain Co., St. James, Minn., 5%; Farmers' Elevator Co., Bathgate, N. D., earned 40%; Farmers' Elevator Co., Milbank, S. D., 20% and \$600 to improvement fund; Farmers' Elevator Co., Nassau, Minn., \$2 per share; Farmers' Elevator Co., Willow Bank, Minn., 8% and 2c per bu.; Farmers' & Merchants' Elevator Co., Argyle, Minn., 20%; Farmers' Elevator Co., Galesburg, N. D., 20%; Flugstad Elevator Co., Flugstad, Ia., 47%.

MEETING AT PLAINFIELD.

A large meeting of directors and managers of northern Illinois co-operative grain companies was held near Joliet on June 17-19. Speaker Adkins of Illinois and E. G. Dunn, democratic candidate for governor of Iowa, spoke. Adkins talked on co-operation and railroad "oppression"; while Dunn, who followed two days later, complained that he had traveled with Adkins through this state, scheduled to speak but never got a chance to talk because Adkins always was introduced first and he never got through.

DIRECTORS' MEETING.

At a meeting of the directors of the Farmers' Grain Dealers' Ass'n of Iowa, at Eagle Grove, resolutions were adopted favoring a state scale inspector, Federal inspection of grain, and a law governing, defining and regulating all co-operative societies, similar to the Wisconsin law. Ralph Van Zyl of Alton, B. Hathaway of Kingsley, and Thomas McManus of Dougherty, were appointed as a legislative committee, and William McManus of Sloan, Simon Kemmerer of Boone, and Roy McVicker of Eagle Grove, named as a committee to prepare a

program for the state meeting to be held in Sioux City next fall.

MANAGERS' ASSOCIATION.

One of the largest grain conventions recently held was that of the Managers' Association at Minneapolis on June 19-21. The managers are the working force of the co-operative elevator companies, and the members, with others interested in the co-operative houses, in attendance numbered at least 500.

Jesse Simpson, president, was in the chair, and introduced to the delegates Mayor Haynes, President John R. Marfield of the Chamber of Commerce, who welcomed the delegates, the response being by J. F. Flemming.

The reports showed a membership of 152 and a cash turn-over of \$1,325.55. The secretary's report indicated an intelligent but at present rather restricted field of activity.

The first discussion was on the anti-option bills in Congress; and the general opinion was that the legislation was not desirable and not in fact asked for by any considerable number of farmers represented in the co-operative companies.

Later on Secretary McHugh of the Chamber of Commerce made an able address on the same subject, incidental to the general topic of his paper, "The Value of Grain Exchanges to Farmers' Elevator Companies."

A large number of papers were read, making a really immense record, that would fill many pages of this paper, where some of the topics have already been worked out in the past.

The officers for the ensuing year were elected as follows:

President—Jesse Simpson, Danvers, Ill.

Vice President—J. M. Johnson, Thompson, N. D.

Secretary—Iver S. Henjum, Hartford, S. D.

Treasurer—W. J. Hunt, Cavour, S. D.

Board of Directors—A. A. Lee, Hatton, N. D.; E. H. Farley, Leland, Ill.; Edward Berg, Jasper, Minn.; E. J. Oyan, Baltic, S. D.; E. C. Bergfield, George, Iowa; A. W. Steen, Protection, Kan.; C. Vincent, Omaha, Neb.; W. J. Ray, Colo, Iowa; E. J. Keenan, Luverne, Minn.; K. Tillotson, Blanchard, Mont.; R. I. Notwehr, Fort Morgan, Colo.

The only important resolutions adopted were the following:

Resolved, That this Association request the various grain exchanges to assist them in an effort to compel the railroads to keep their rolling stock in better condition and to do their own cooping.

Resolved, That we recommend concerns loaning funds to farmer elevator companies to demand an audit of the books of each company be made at least once each year.

Resolved, That we recommend that the Minneapolis Grain Bulletin be instructed whenever there is a change in margin on price card at any station to notify all subscribers at said station immediately.

Resolved, That a committee be appointed to adopt some emblem distinctive of this Association.

MANITOBA ELEVATORS.

It is now understood that the 172 state-owned elevators of Manitoba will on August 1 be turned over to the Grain Growers' Grain Co., a co-operative concern. The title to the elevators will continue to be vested in the government, and the company will pay \$66,000 a year as rental charges. This is 6 per cent on the capital account, which amounts approximately to \$1,100,000.

On July 2 it was officially announced that the Dominion Government had secured a site for an elevator at Head of the Lakes, to hold 3,250,000 to be built immediately.

It was on the same day announced that a company had been organized to establish a line of houses extending from Montreal to the Pacific Coast in connection with the Grand Trunk Pacific Railway system. It will be known as the Grand Trunk Terminals Warehouse Co., Limited, and contracts have been entered into between the new company and the Grand Trunk and Grand Trunk Pacific Railways, the latter agreeing to turn over to the new company all its warehousing business at the various points for a period of thirty years. The first warehouses will take in Montreal, Toronto, Fort William, Winnipeg, Calgary, Edmonton, Vancouver and Prince Rupert, and as a preliminary step the property of the Montreal Warehousing Co. at Montreal has been purchased. The capital of the company will be \$10,000,000 of which \$5,000,000 will be issued at the present time. The first offering of the bonds was made privately on July 1 by the Quebec Savings & Trust Co., and it was stated that although there had so far been no public announcement of the issue upwards of one million dollars of the issue had been taken during the day.

Port Colborne has been grain-congested, the local transfer elevator by June 15 having been filled full with several ships held for unloading.

Lee Peterson of Albert Lea, Minn., has taken a position with the United States government in the bureau of the standardization of grains at New Orleans.

CROP REPORTS

Michigan July report makes the wheat crop a trifle less than 6,000,000 bu. Corn condition is 68; last July 92.

The Kentucky state report makes July condition 84.5. Wheat is only a three-fifths crop. Oat condition, in June, 92.5 against 90.

The prospect in Oklahoma is good for all crops. Corn starts off with a condition of 88.7 against 50 a year ago. Wheat shows a decline from last month; condition at harvest, 74. Oats condition at harvest, 69.

The crop bulletin of the Illinois State Board of Agriculture issued July 6 says, "Corn conditions in Illinois are unfavorable." Condition 80. Winter wheat is in worse condition, averaging 45, a decrease of 9 per cent since May 1.

Prof. R. A. Moore reports that he has never seen better crops in southern Wisconsin than this year. Unless all signs fail, oats and wheat crops will be the largest ever harvested in that part of the state. The corn crop may not be up to standard.

The Ohio July report makes corn condition 77, against 89 last year; acreage 3,197,000, or 5 per cent more than last year; damage, 11 per cent by grubs. Wheat condition 43, against 45 in June and 84 last year. Oats condition 98, against 95 in June.

Secretary F. D. Coburn of the Kansas Agricultural Department makes the wheat condition on July 1, 76.6, indicating a crop of about 86,000,000 bushels. Corn condition is now 84, with about 7,000,000 acres growing. This is a decrease of 10 per cent, due to the late season.

Snow makes the condition of corn 83.8 against 82.4 last year, and acreage 106,835,000 acres, an increase of 1.3 per cent, indicating a crop of 2,851,000,000 on the revised method, or a yield of 3,022,000,000 under the old method. The low condition is mainly due to the lateness of the season.

G. J. Gibbs estimates 12,000,000 bushels of wheat to be the minimum for this season in Texas. The quality is excellent for milling purposes. The oats crop will be a record breaker, without doubt, reaching 50,000,000 bushels. The corn crop promises a 65 per cent normal yield or 150,000,000 bushels.

Missouri July report says quality of new wheat is 91.6, making 11 per cent improvement in June. The yield per acre is placed at 12.4 bushels, against 14.8 last year. This indicates a 20,000,000 crop. Government harvest is favorable but late, only 51 per cent of crop out by July 1 against 96 a year ago. Corn is clean and the growth is remarkable with condition, 85.6. Oats condition is 93.

S. W. Strong reports from 519 stations in 63 counties in Illinois north of the Vandalia R. R. and including the counties of Lawrence, Wabash and White: Oats acreage in 488 reports, compared with last year, 102.26 per cent, present condition in 487 reports, 93.29 per cent. Corn acreage, in 493 reports, as compared with last year, 105 per cent, present condition 78.67 per cent. General reports are that the crop is from three to four weeks late.

Van Dusen-Hamerglow Co., Minneapolis, under date July 10, says: "Good general rains have fallen over all the Northwest since our last letter, and these rains have been of very material benefit in all districts. Many fields which were reported a total loss are now reported as appearing as though they would make half a crop. In spite of the rains some districts of South Dakota have been very materially damaged; but taking the three states as a whole only a little damage has been done from recent hot weather. All reports from North Dakota indicate that crops there are in almost perfect condition. The same is true in Minnesota, excepting in some districts in the southwestern part of the State, where they have had too much rain. The recent rains have been of especial benefit to flax and at the present time this crop makes a most favorable showing. Wheat, barley and oats are headed out and rye harvest will be in full swing by the end of this week.

CROP REPORT.

The Crop report for July gives the following estimates:

Crop.	Acreage, 1912		Condition	
	Pct. of 1911.	Acres.	1912.	1911.
Winter wheat.....	88.3	25,744,000	73.3	76.8
Spring wheat.....	94.2	19,201,000	89.3	73.8
All wheat.....	90.7	44,945,000	80.1	75.6
Corn	102.2	108,110,000	81.5	80.1
Oats	100.2	37,844,000	89.2	68.8
Barley	99.3	7,574,000	88.3	72.1
Rye	88.2	85.0
Flax	103.5	2,992,000	88.9	80.9
Rice	102.0	710,100	86.3	87.7
Hay	85.2	64.9

The amount of wheat remaining on farms July 1 is estimated at 3.8 per cent of last year's crop, or about 23,876,000 bushels, as compared with 34,071,000 on July 1, 1911, and 35,929,000 on July 1, 1910.

The following gives the indicated yield per acre and comparisons of total production. The indicated yield for 1912 is based upon the ratio of the average condition on July 1 to the final yield in the five years 1906-1910:

Crop.	Yield per acre.		Total production in millions of bushels.		
	1912.*	Final.	1911.	1912.*	Final.
Winter wheat.....	13.9	14.8	358	430	418
Spring wheat.....	14.1	9.4	271	191	265
All wheat.....	14.0	12.5	629	621	683
Corn	26.0	23.9	2,811	2,531	2,552
Oats	30.1	24.4	1,139	922	1,007
Barley	25.6	21.0	194	160	173
Rye	16.0	15.6	..	33	30
Flax	†9.4	7.0	28	19	20
Rice	31.7	32.9	23	23	..
Hay, tons.....	‡1.40	1.10	..	47	..

*Interpreted from condition reports. †Based on average for 1905-09. ‡Based on average for 1908-10.

CORN.

States.	Acreage, 1912.		Condition	
	Per cent of 1911.	Acres.	1912.	July 1, 10-yr. av.
Illinois	105	10,658,000	78	87
Iowa	102	10,047,000	83	86
Kansas	98	8,526,000	84	83
Nebraska	102	7,574,000	80	84
Missouri	103	7,622,000	83	84
Texas	100	7,300,000	84	74
Oklahoma	96	5,448,000	90	83
Indiana	102	4,947,000	77	86
Ohio	105	4,095,000	77	84
Georgia	107	3,950,000	78	88
Kentucky	100	3,600,000	82	88
Tennessee	98	3,332,000	86	88
Alabama	104	3,120,000	82	86
Mississippi	109	3,106,000	82	83
North Carolina.....	104	2,808,000	88	89
Arkansas	107	2,557,000	84	85
South Dakota.....	108	2,495,000	76	85
Minnesota	103	2,266,000	78	82
Virginia	100	1,980,000	88	90
Louisiana	101	1,818,000	77	80
South Carolina.....	107	1,915,000	79	85
Michigan	96	1,622,000	72	80
Wisconsin	102	1,632,000	77	84
Pennsylvania	101	1,449,000	78	87

United States.....102.2 108,110,000 81.5 84.6

OATS.

States.	Acreage		Condition:	
	Per cent of U. S. in State.	July 1, 1912.	July 1, 1911.	July 1, 10-yr. av.
Iowa	13.1	94	70	87
Illinois	11.2	90	69	82
Minnesota	7.8	91	67	87
North Dakota	6.1	91	84	86
Nebraska	6.0	83	40	81
Wisconsin	6.0	88	91	92
Ohio	5.6	92	71	86
Indiana	5.2	95	73	82
Kansas	4.5	83	34	74
South Dakota	4.1	85	25	84
Michigan	3.9	83	88	88
New York	3.1	81	93	92
Pennsylvania	2.9	88	88	91
Missouri	2.7	87	35	79

United States ...100.0 89.2 68.8 84.8

Wichita's first car of wheat arrived on June 28 over the Santa Fe and was sold to the Moffett Grain Co. at \$1.13½ Mo. River basis. The grain graded 2, hard Turkey red, 59½ lbs.

Kansas City and St. Louis received their first cars of new wheat on June 17, both from Oklahoma. The car at Kansas City graded No. 3 red, weighed 58½ lbs. and sold at \$1.05; the car at St. Louis graded No. 2 red and was auctioned at \$1.08.

The price of grain bags in Washington, Idaho and Oregon had advanced to 10c by July 1 (the record price), and was still on the move, the maximum of 12c being expected before the harvest should end the demand. About 50 million bags have been sold, but 6,000,000 more may be needed.

Chas. E. Lewis, the well-known grain man of Minneapolis has achieved the honor of namesake to a town site on the "Soo" Line. At present the town consists for the most part of eighty acres of Wisconsin land and a 75-foot flagpole, but officials of the Soo railroad say that within a few weeks it will be a flourishing village. The dedication was a gala occasion. The tract is located on the new extension from the Twin Cities to Duluth, 77 miles northeast of Minneapolis and six miles north of Frederick, Wis. Mr. Lewis' summer home is located one and one-half miles from the town site. He says he intends to open a bank in Lewis as soon as the town needs one.

HAY AND STRAW

Kentucky has cut two good crops of alfalfa this year.

Ohio reports a hay crop beyond recent expectations.

Chicago in June began receiving new prairie hay from Texas.

The worm has been working some in the alfalfa fields of Iowa.

The hay crop in New York was retarded by the cold, dry weather.

The hay crop in the Bitter Root Valley in Montana is an immense one.

Heavy rains and cool weather have made a good hay crop in Washington.

Mississippi has had a record breaking hay crop along the river this year.

A company of Los Angeles men are promoting an alfalfa mill at Chino, Cal.

Johnson County, Ind., reports a bumper hay crop and local prices have taken a tumble.

Perfect weather conditions have produced the heaviest hay crop ever grown in Idaho.

The hay crop of Oklahoma, which has been very abundant and of good quality, has been cut.

Northern Illinois has yielded one good crop of alfalfa and August will bring another cutting.

Newly cut alfalfa hay in the Yakima Valley, Wash., was somewhat damaged by June rains.

A large acreage of alfalfa has been cut in Washington and a good second crop will be cut soon.

Farmers in the vicinity of Spokane, Wash., have had one good yield of alfalfa and expect two more cuttings.

The Nutriline Milling Co. of Crowley, La., is using Mexican alfalfa for the manufacture of prepared feeds.

The second crop of alfalfa has been cut in the neighborhood of Exeter, Cal. It was large and of good quality.

The army transport Dix, from Tacoma for the Philippines, this month will carry more than 4,000 tons of forage and grain.

Adams County, Pa., reports the finest hay crop in twenty years. One cutting of alfalfa has been made, baled and marketed.

Minnesota has a record hay crop this year. It is considered the largest hay harvest in the history of that section of the country.

The alfalfa crop in Webster Co., Iowa, yielded two tons to the acre at the first cutting. Two more cuttings are expected this year.

The Idaho hay crop is heavy and of good quality. The Indian school near Lapwai ran their machines night and day, in June, on alfalfa.

The crop of alfalfa at the State Reformatory, Hutchinson, Kan., is a record-breaker. From 49 acres the first cutting yielded 90 tons.

Michigan has been shipping some splendid consignments of hay to New York City. One cargo consisted of 280 tons and brought \$21 a ton.

The business men of Angleton, Texas, have organized a company for the purpose of establishing a hay barn. The capital stock is about \$10,000.

Wisconsin is expecting a large hay crop this season. Medium clover reached the size of the mammoth clover and timothy has had a splendid growth.

South Dakota has matured its hay crop somewhat earlier than usual. It is estimated that the crop will be worth between \$12,000,000 and \$15,000,000.

Reports come from all parts of Virginia of an immense hay crop from first cuttings. Alfalfa leads, but timothy, herd grass and the other grasses are fine.

The Edwards-Ihrig hay plant at Ameo, Wis., was sold recently at public auction. It is reported that it will be operated by a hay products company of Oshkosh, Wis.

The Peoria Association of Commerce is making an effort to secure the 1913 convention of the National Hay Association, which will be held this year in Kansas City, beginning July 25.

The Michigan alfalfa crop has been harvested and is exceptionally heavy. It is said that the fields made as fine a showing as any in California. While Michigan cannot produce as many crops a year as California can, the difference in the price of hay more than counteracts the amount of the crop.

Farmers have come to the opinion, says the Minneapolis Market Record, that hay deteriorates by being left to stand uncut so long as has been too much the practice and began work in the fields earlier this year; and in some places the clover hay was ready cut and put away by June 25. They had also begun in lowland meadows, and these early hay cutters are gratified with the outcome. Advices to hand are not altogether of large yield, but in the

Northwest it is reported generally of full average yield.

Over 500 enthusiastic alfalfa growers in Wisconsin, members of the Alfalfa Order of the Wisconsin Agricultural Experiment Association, will grow a total of about 2,000 acres of alfalfa this year.

Severe rain storms in Oregon have caused some damage to the exceptionally fine hay crop in that part of the country. In some parts it was estimated that a third of the crop was injured. Late hay was not damaged at all.

The Oklahoma State Hay Dealers' Association has been incorporated with W. L. Harrison of Inola president and J. A. Martin of Checotah, secretary and treasurer. Wagoner is the permanent headquarters of the Association.

A report, recently issued by the Secretary of the Department of Agriculture, shows there were 606,000 acres planted to hay in Texas in 1911 and the total yield 606,000 short tons, or one ton to the acre. The farm value is quoted at \$11.90 per ton.

Latah County, Idaho, reports the largest yield of alfalfa ever known there without irrigation. Fall and spring wheat never have looked so well. There are, also, thousands of acres of oats and barley which, it is estimated, will make record yields.

F. B. Gillmore, who has an alfalfa farm in Stafford County, Kan., figures that his first cutting this year paid him a net profit of over \$11.60 an acre. Last fall his 20 acres looked so badly, during the dry weather, that many pronounced the plants dead. That field yielded 27 tons.

Chicago hay shippers and receivers are greatly interested in a decision which the Interstate Commerce Commission will shortly make on the proposed advanced railroad rates on hay throughout the West. The advances sought range between 20 and 70 cents a ton. This would approximate an additional \$150,000 to freight rates on hay reaching Chicago.

The Dept. of Agr. in Bul. 485 in "Sweet Clover," apropos the making of hay says: "The first season's growth does not usually get coarse and woody and should be cut when it shows its maximum growth in the fall. It is not necessary to allow time for a second growth to come on before cold weather. The second season it is necessary to cut the hay before the first bloom buds appear, since after this stage the plant rapidly becomes coarse and woody and much less palatable to stock. This rule is held by a writer in the Nebraska Farmer to be wrong, that sweet clover should not be cut for hay until the first seeds are just past the dough stage, as late cutting gives a higher feeding value when it is cut so early, as generally advocated it is almost impossible to cure the hay. The handling of the hay after it is cut is similar to alfalfa or red clover. The leaves, of course, are the most valuable portion of the hay, and their loss should be studiously avoided."

GOOD AVERAGE HAY CROP PROMISED.

Although from some sections east and north of the province of Quebec complaints were heard of poor fields of hay, the warm weather has wonderfully improved them, and the promise now is for a good average crop of hay in the province. This accounts for those farmers who are holding hay being so anxious to dispose of it on the declining market. No. 1 hay that was held for \$23 to \$24 per ton a few weeks ago has been sold at \$20 to \$20.50 per ton, and some have accepted less money. Choice No. 2 has changed hands on this market at \$18 to \$19 and ordinary No. 2 at \$16.50 to \$17. Clover mixed has sold at \$14 to \$15.50. These figures show quite a decline in prices, which indicate that the crop has improved of late. Of course, farmers are anxious to have their barns cleared of old crop to make room for the new, and this is another reason for farmers crowding their holdings on the market.—Montreal Trade Bulletin.

NATIONAL HAY MEETING.

The following is the program of the 1912 annual meeting of the National Hay Association to be held at Kansas City on July 16, 17 and 18:

Convention called to order—P. E. Goodrich, President, Winchester, Indiana.

Invocation—Rev. Trigg A. M. Thomas, Pastor Eastminster Presbyterian Church.

Address of Welcome in behalf of the State of Missouri—Gov. H. S. Hadley.

Address of Welcome in behalf of Kansas City—Mayor Henry Jost.

Response in behalf of The National Hay Association—Chas. England, Baltimore.

Memorial Address—E. M. Wasmuth, Roanoke, Ind.

Report of the President and Board of Directors, P. E. Goodrich, Winchester, Ind.

Address: "The Need for Banking and Currency Reform"—Robert Bonyng, Chicago, Ill.

Report of Legislation Committee—C. J. Austin, Chairman, New York, N. Y.

Appointment of Committees.

AFTERNOON SESSION.

Report of Statistics Committee—S. T. Veveridge, Chairman, Richmond, Va.

Address: "How to Make Two Blades of Grass Grow Where but One Grows Now"—Bert Ball, Secretary Crop Improvement Committee, Chicago, Ill.

Report of Committee on Conservation of Natural Resources—E. G. Rich, Chairman, Ledyard, Ia.

Address: "The Interstate Commerce Commission and State Railroad Commissions and what they have done for Shippers"—J. A. Heath, Richmond, Mich.

Report of State Vice-Presidents—C. T. Pierce, Chairman, Van Wert, O.

Paper: "Necessity for National Organization of the Hay Trade"—C. D. Carlisle, Kansas City, Mo.

Address: "Fire Insurance on Hay"—E. W. Miller, Greenville, Ill.

WEDNESDAY MORNING, JULY 17.

Visit to the Hay Yards. See Entertainment Program.

AFTERNOON SESSION.

Report of Standard Bales Committee—G. B. Cavert, Chairman, Eradock, Pa.

Report of Auditing Committee.

Report of Secretary-Treasurer—J. Vining Taylor, Winchester, Ind.

Address: "Some Considerations of Alfalfa"—Sec'y F. D. Coburn, Topeka, Kans.

Report of Grades Committee—Maurice Niezer, Chairman, Fort Wayne, Ind.

Report of Committee on Board of Directors Report.

Address—C. A. Prouty, Chairman Interstate Commerce Commission, Washington, D. C.

Report of Nominating Committee.

THURSDAY MORNING.

Report of Arbitration Committee—H. G. Pollock, Chairman, Van Wert, Ohio.

Report of Transportation Committee—H. W. Robinson, Chairman, Greenspring, O.

Report of Joint Hay and Grain Committee—E. L. Rogers, Chairman, Phila., Pa.

Paper: "Tidings from the Southland"—W. L. Fain, Atlanta, Ga.

Report of Resolution Committee.

Unfinished and new business.

Report of Committees. Election of Officers.

Adjournment.

ENTERTAINMENTS.

Tuesday, 1 p. m., luncheon and reception, for the ladies only, in the parlors, Ccates House.

Tuesday evening, 8 p. m., all members and ladies entertained by R. R. Club at their club rooms.

Wednesday, 8:30 a. m., delegates will leave for a trip through Kansas City's Hay Market and Exchange building to see how their hay is handled, returning to the hotel at 10 a. m. for an automobile ride, members and ladies. This trip will include the park and boulevard system of Kansas City.

Wednesday evening, 7 p. m., concert, vaudeville, banquet and other forms of entertainment will be given at the Electric Park (the Coney Island of the West), leaving the hotel in special cars provided for this purpose.

Thursday evening, ball at the Casino Hall for members and ladies.

A WORD OF ADVICE.

C. A. King & Co., Toledo, on July 1 handed out their annual word of advice to shippers of grain beginning a new season. It is worth framing and hanging where one can read it at least once a day. It runs in this wise:

"Don't take crippled cars. Have them clean, in good condition and properly sealed. Have the car number and initials on the bill of lading; see it is properly signed by the agent, endorse it, and attach to your draft in drawing. Send us your bills of lading promptly to avoid delay in unloading. Don't draw with exchange. Save it. Advise promptly of every shipment and give instructions with every car. We will keep you supplied with postals. Avoid excess freight by loading over the minimum weight. Make drafts reasonable; allow margin. Make your early shipments here."

"Be careful. Don't mix poor wheat with the good, unless you can do it scientifically. Keep your smutty wheat separate. Mixing smutty or mow-burnt wheat violates the pure food law. Watch it in buying. Don't allow your rye to become too intimate with the wheat in loading out. The inspectors in all markets have those large, inquisitive triers, which probe to the intestines of the car. We sell all wheat below three red by sample. We try all buyers and allow you the best that can be secured. Grades here are the same as last season. Elevator capacity has been enlarged. All wheat which can be improved to advantage, is blown for the benefit of the shipper. Not so in some other markets."

Lake commerce showed a heavy increase in June, 1912, over 1911, especially in grain market 5,670,578 bu. were reported handled in 1912 against 2,984,896 in 1911.

FIELD SEEDS

Wichita dealers expect an immense crop of Kaffir this season.

Montana's flax crop this year is expected to be the largest in the history of the state.

The American Seed Dealers' Association held its annual meeting in Chicago on June 24-26. The Association's interests are mainly with garden seeds.

The Gallatin Valley has about 10,000 acres under seed peas this season; and it is expected 75% of the seed crop of the country will be gathered here this season.

As to new Crop European red clover seed, R. Liefmann Sohne Nachf, Hamburg, say, June 10: It cannot be called favorable, and same is true of the crimson, the acreage of both which may be cut down.

Dickinson Seed Co., Chicago, has been incorporated; capital stock, \$2,500; to do a general grain, seed, warehouse and manufacturing business; incorporators, Charles Dickinson, Eugene H. Garnett and Frances Dickinson.

L. D. Langworthy and Sam'l H. White have purchased the stock of the Mills Seed Co. of Washington, Ia. Mr. Langworthy is the practical seed man and Mr. White the capitalist. The firm's business runs about \$100,000 a year.

L. A. Felgar, manager of the Ohio-Alberta Farms Co., a practical dry farmer, operating a very large acreage eight miles south of Lethbridge, Alta., says a good stand of alfalfa on dry land can be had with only two pounds of seed per acre, planted in rows.

Alfalfa weevil has appeared in the Hoope Valley Indian Reservation; and the newspapers are erroneously attributing the presence of the pest to the fact that seed was bought in Utah. We believe it is not conveyed in the seed at all, but by other means.

The Oklahoma experiment station is at work on new varieties of beans, including the "Japanese," a drouth resister and a valuable food for man and beast, and with varieties of Mexican beans. One of the most remunerative of the station's plants, says the Oklahoman, is the Russian sunflower, whose seed is worth from 7 to 10c per pound.

The blue grass seed crop of Kentucky is this year the largest on record. In 1908, the next largest year, the crop was about 600,000 bushels, but the total this year has not as yet been estimated. The smallest crop on record was that of 1910, 200,000 bushels. Prices in Kentucky have run from 45c in 1900 to as high as \$1.75 per bushel for crop of 1911.

Garden and field seeds have all ruled much higher this year than last. An advance of from 10 to 25 per cent was made at the beginning of the season and this has been maintained. Grass seeds are much higher than for several years. Seed peas cost 10 cents more a quart than twelve months ago. Alfalfa seed was an exception to the field seeds, holding to the same price as a year ago in the West.

Tests are being made with strains of alfalfa to ascertain those best adapted to northern Wisconsin, at the Northern Wisconsin Branch Experiment Stations of the University of Wisconsin, at Ashland, Ellis Junction, Marshfield, Spooner and Superior. Several fields are also being grown in co-operation with farmers. Clover has already proved to be a successful crop in the upper part of the state and it appears from tests conducted that alfalfa will be almost as successful.

G. D. Sutton Co. will begin to erect a seed warehouse and business office at Geneseo, Ill., in the very near future. The specialty of the company will be seed corn. The house will be 42 feet by 70 feet and 36 feet high. On all sides and ends will be large ventilating windows by opening which the corn will be dried in the early fall. As soon as the cold weather comes the ventilating windows are closed and the corn dried by means of electric fans that connect with the hot air heating system which will be installed.

FOREIGN SEED POOR.

The Federal Department of Agriculture during the past few months has examined a considerable number of lots of forage plant seeds imported into the United States during 1911, finding that many samples consisted of seed of low vitality and high weed seed content. The seeds examined were those of alsike clover, red clover, white clover, and hairy vetch, showing the pure seed consisted of only 44.9, 64.2, 52.2 and 23 per cent, respectively, while the germination was as follows: 38.8, 37.0, 30.5, and 77.0, respectively. A special examination of the seed of alsike clover and red clover imported from Canada showed that approximately one-half was unsalable for seed purposes in that country, the seed-control act there prohibiting sale when more than a prescribed number of noxious seeds are found to the pound. One lot of alsike contained less than 50 per cent of pure seed, germinating only 15 per cent, or 7½ per cent of the entire bulk. This par-

ticular lot contained approximately 135,000 weed seeds in each pound.

ALFALFA SEED PRODUCTION.

The North Dakota Agr. Tillage Exp. Station, in Bulletin 85, on "Alfalfa" in regard to experiments in seed production, says, in part:

The outlook for this industry is encouraging, but much remains to be learned, both practically and theoretically. The nursery planted in 1908 contained something like 1,000 plants in 1909. The amount of seed and the average yield of seed per plant, was obtained for each strain. The number of plants, the weight of seed in grams, and the average weight of seed per plant in grams, are given below:

Kinds.	Number of Plants.	Weight of Seed-grams.	Weight of Seed per Plant-grams.
Turkestan	264	3,598	13.6
Other than Turkestan.	754	16,630	22.0
Selfed plants	19	276	14.5
Total	1,018	20,228	19.9

A total of 264 Turkestan plants gave an average yield of 13.6 grams, or nearly half an ounce. There were 754 plants other than Turkestan, which gave an average yield per plant of 22 grams, or about ¾ of an ounce. Nineteen caged plants, hand pollinated, gave an average yield of 14.5 grams. The total 1,018 plants gave an average yield of 19.9 grams of seed per plant. These yields are quite high, as may be seen if extended to an acre basis. With plants 2½ feet apart each way, and with ¾ of an ounce of seed per plant, the yield per acre would amount to 327 pounds, or nearly 5½ bushels, which is a heavy yield for alfalfa.

Some strains are remarkably better than others. The following summary includes some of the more striking variations:

Strain.	Number of Plants.	Seed per Plant-grams.
Baltic	45	42.5
Chinook, Montana (12816).....	19	35.5
Commercial Sand Lucern (21269)...	8	56.0
Grimm (2 strains).....	123	21.9
South Dakota Turkestan (32520)...	59	8.8

NEW SEED INSPECTION RULES.

The following regulations have been adopted by the board of directors of the Board of Trade of the city of Chicago for the inspection of prime timothy, clover and alsike clover seeds, in effect July 2, 1912:

1. Prime Timothy Seed shall be good average color, clean, sound, not too much hulled, and reasonably free from foul, or foreign seed; each lot must be of uniform quality throughout and packed in clean seamless cotton bags, sewed.

2. Prime Clover Seed shall be good average color, clean, sound, and reasonably free from brown and foreign seed; each lot must be of uniform quality throughout and packed in clean, seamless cotton bags, sewed.

3. Prime Alsike Clover Seed shall be good average color, clean, sound, and reasonably free from brown and foreign seed; each lot must be of uniform quality throughout and packed in clean, seamless cotton bags, sewed.

4. Samples to be arbitrated upon must be presented to the committee by 12:30 P. M., and if passed upon as Prime, the committee will issue certificate of arbitration, accordingly, which in all cases of delivery must accompany the invoice.

5. A charge of \$1 per car, or less, will be made for arbitration fees, which, in case the sample passes as prime, shall be paid jointly by the buyer and seller; and if said sample fails so to pass, the fee shall be paid by the party tendering the sample for arbitration.

6. The certificate shall hold good for delivery in case of both timothy and clover seed for the crop years, provided in all cases the identity of the seed so arbitrated upon has been preserved.

7. All lots of other seeds to pass as prime must be of good uniform quality throughout, and packed in clean, seamless cotton bags, sewed.

8. In all sales of timothy, clover and other grass and field seeds for future delivery or for transfer to Eastern railroads by carloads, a carload shall be deemed to contain thirty-six thousand (36,000) pounds.

9. In sales of timothy, clover or alsike clover seed in less than carloads, such sales shall be made in lots of 50 bags, or multiples thereof.

10. On sales of a specified number of bags of timothy, clover or alsike seed, delivery shall be made on basis of 150 pounds of clover or alsike per bag and 120 pounds of timothy seed, per bag, but delivery may vary within reasonable limits as to number of bags used to contain the amount of seed contracted for.

11. Any excess or deficit within the above limits shall be settled for at the current market upon the day of delivery. Bags to be paid for at current market.

Hess Grain Driers

MODEL FOR 1913

The stationary driers for 1913 show a marked change in distribution of materials.

The heavy cast iron plates heretofore used have been superseded by plates of pressed galvanized steel, much less in weight, though the necessary strength is retained. This reduces the cost of the drier housing, the load upon it being lessened. The saving of material in the drier itself also permits a *very substantial reduction in our price.*

We announce also for all portable and stationary driers A NEW DESIGN OF STEAM COILS suitable for exhaust or live steam. The new coils provide a continuous circuit for the steam, hence positive and rapid circulation. With four pounds back pressure the largest coil is filled and thoroughly heated *in less than three minutes.*

These coils are so fitted that unequal strains from expansion and contraction are impossible, and there is no breakage of parts. The pipes are self-cleansing, and no dust nor dirt can accumulate upon nor within them.

We have also designed a new drying system for

EAR CORN

with furnace heat. It is inexpensive, and adapted to the needs of the large grower, and of the seed merchant. No boiler required, and no machinery necessary in its operation.

With our unequalled facilities for manufacturing and our corps of drier engineers always available, we can serve you more promptly and more efficiently than others. Free booklet and plans.

Hess Warming & Ventilating Co.

910 Tacoma Bldg.

CHICAGO, ILL.

More Hess (U. S.) Moisture Testers are in use than all other makes combined.

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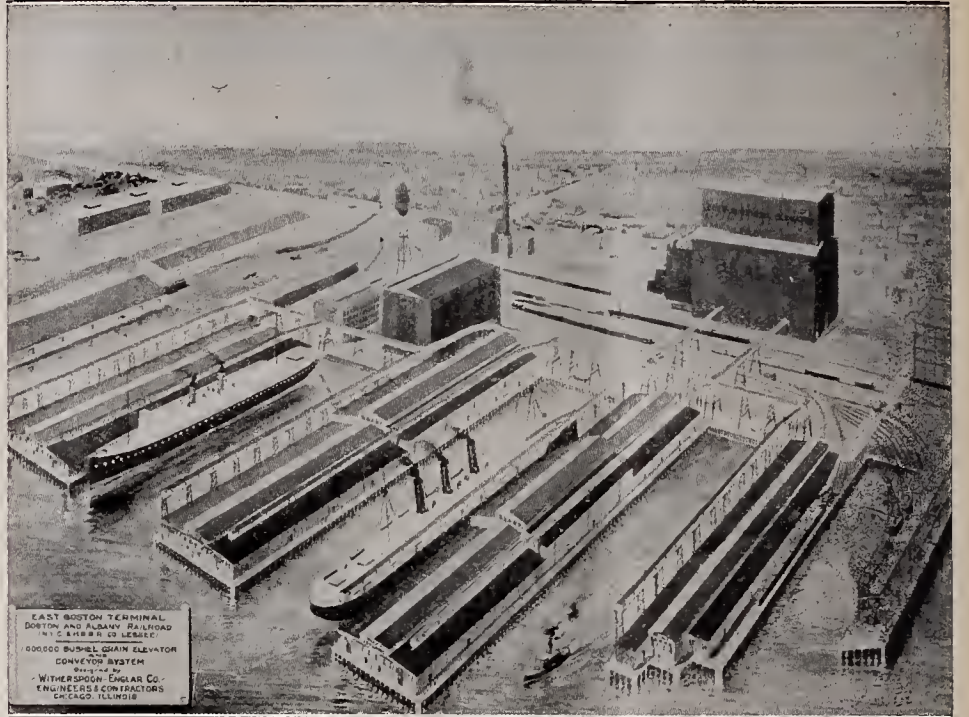
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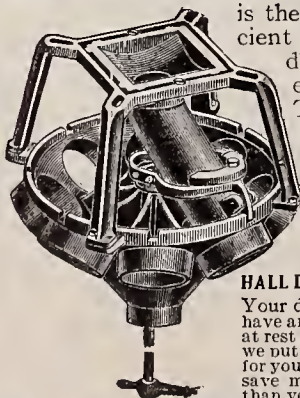
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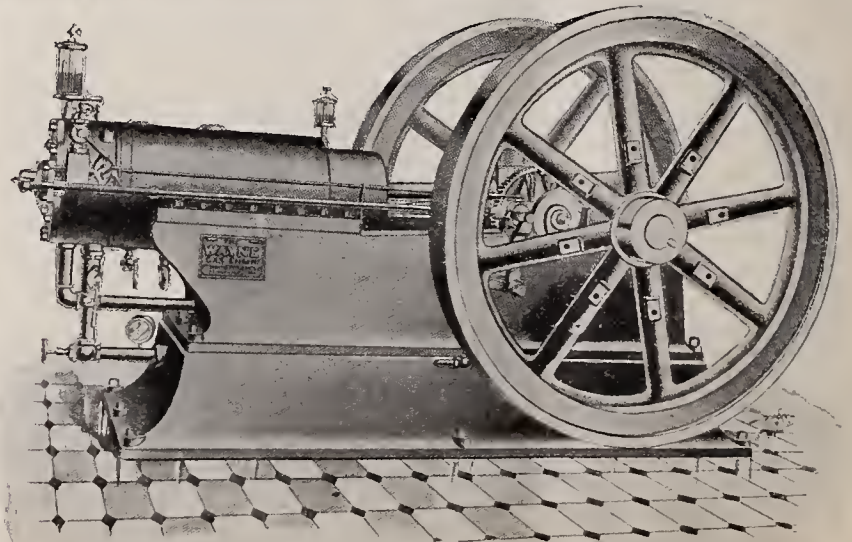
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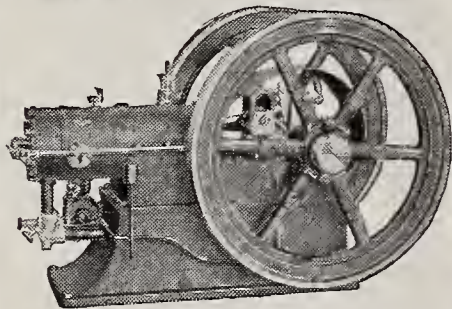
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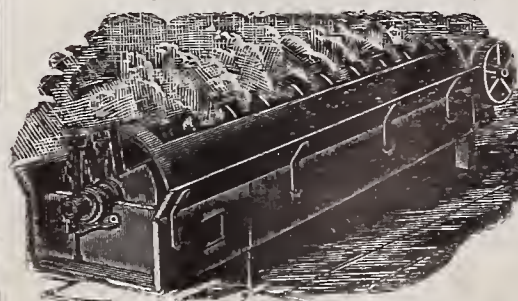
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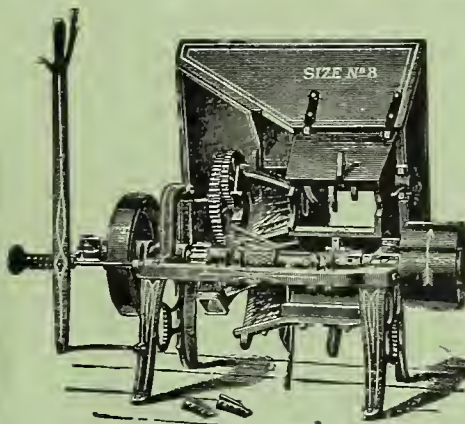
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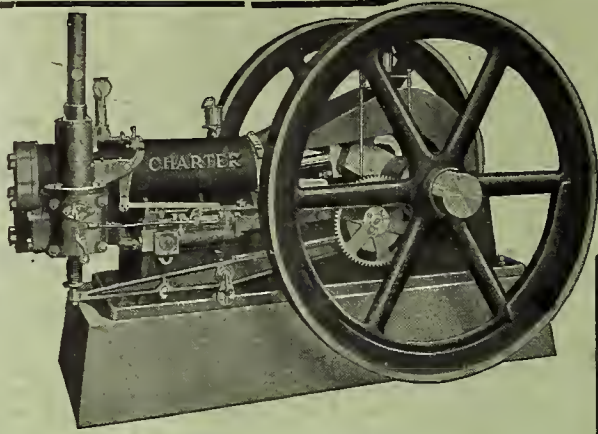
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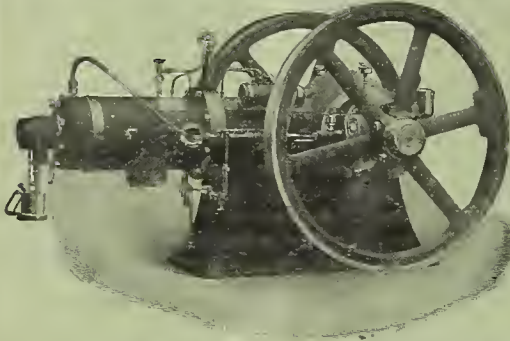
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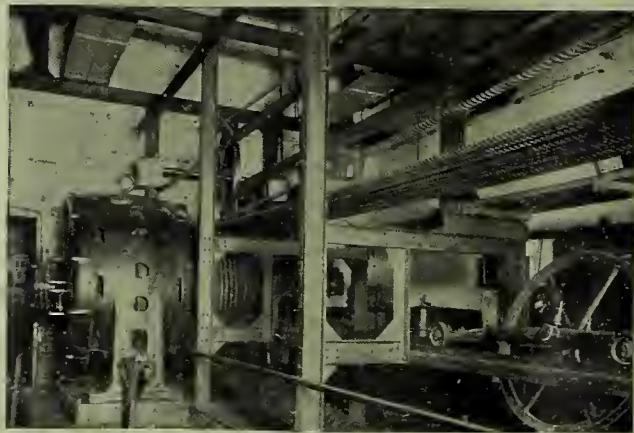
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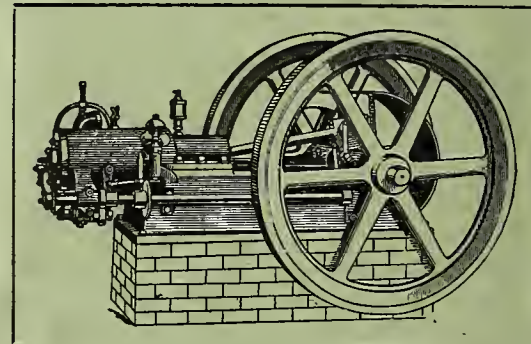
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